

Grand Junction Regional Airport

Wildlife Hazard Management Plan



Pursuant to CFR Title 14 FAR part 139.337 (Wildlife Hazard Management Plan Requirements) the Grand Junction Regional Airport has developed this Wildlife Hazard Management Plan (WHMP).

Other documents that provided guidance in the compilation of this document include:

- ➔ FAA Advisory Circular 150/5200-18C, Airport Safety Self-Inspection;
- ➔ FAA Advisory Circular 150/5200-32A, Reporting Wildlife Aircraft Strikes;
- ➔ FAA Advisory Circular, 150/5200-33B, Hazard Wildlife Attractants on or Near Airports;
- ➔ FAA Advisory Circular 150/5200-36, Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculums for Airport Personnel Involved in Controlling Wildlife Hazards on Airports.

The basis of this document is on the findings of the Wildlife Hazard Assessment, conducted by the U.S. Department of Agriculture's Wildlife Services, which was initiated in June 2007, and completed in May 2008.

This plan will be reviewed and evaluated annually by the Grand Junction Regional Airport and will be updated if changing circumstances merit.

All changes made to the WHMP will be sent to the FAA for approval.

The plan places a particular emphasis on identification and abatement of wildlife hazards within the airfield environment. All areas on the airfield will be managed in a manner that is non-conductive to wildlife.

The plan outlines priorities for habitat management, including target dates for completion.

Additional wildlife attractants (e.g., lakes, ponds, landfills, etc.) within 5 miles of the airfield will also be addressed; as they could potentially attract wildlife in a manner that could jeopardize safety of air traffic operations into and out of Grand Junction Regional Airport.

The Airport will take immediate measures to identify and mitigate wildlife hazards whenever they are detected or whenever airport management has been advised that hazardous conditions exist.

The plan outlines steps for monitoring, documenting, and reporting potential wildlife hazards and strikes at Grand Junction Regional Airport.

Protocols for responding to hazardous wildlife situations are presented, including roles and responsibilities of airport personnel.

SIGNATORIES

The following Wildlife Hazard Management Plan for Grand Junction Regional Airport has been reviewed and accepted by the FAA. This document will become effective with the following signatures:

Lynn Deardorff
Certification Inspector
Federal Aviation Administration

Date

Rex A. Tippetts, A.A.E.
Director of Aviation
Grand Junction Regional Airport

Date

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Introduction

I. Overview

The Grand Junction Regional Airport is located on the north boundary of the City of Grand Junction. The Airport encompasses 2,357 acres and is 4,858 feet above mean sea level. The Federal Aviation Administration (FAA) categorizes the Airport as a non-hub, commercial service airport.

The Air Operations Area (AOA) is approximately 535 acres, with a perimeter road spanning 9.3 miles. Approximately 2.8 miles of the road is fenced by nine-foot chain-link with three strand of barbed-wire along the top, and the remaining 6.5 miles is fenced by four-stranded barbwire.

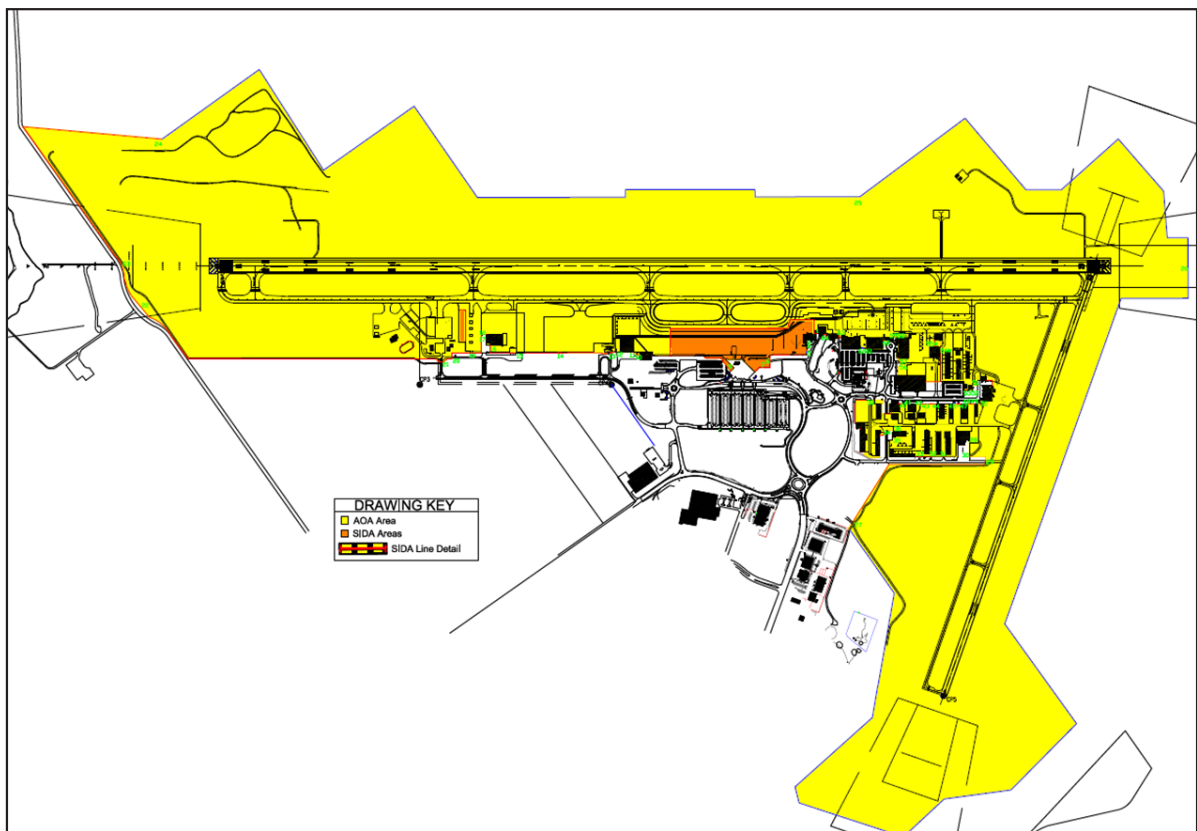
Grand Junction Regional Airport has two runways; the primary runway 11/29, and the crosswind runway 4/22.

Runway 11/29 – Primary Runway.

- Length and Width: 10,501 feet by 150 feet with 100-foot long by 250-foot wide blast pads on each end.

Runway 4/22 – Crosswind Runway.

- Length and Width: 5,501 feet by 75 feet.
- Runway 04/22 is closed from 2200 (10 p.m.) To 0600 (6 a.m.)



This Wildlife Hazard Management Plan (WHMP) establishes the responsibilities, policies, resources, and procedures of the Grand Junction Regional Airport. Recognizing the potential hazards wildlife pose to aircraft and human lives, the Grand Junction Regional Airport finds it vital to implement a plan, according to Code of Federal Regulations (CFR) Title 14 Federal Aviation Regulations (FAR) Part 139.337(e)(f), that addresses the required components of Wildlife Management.

Each required component is represented herein. Provisions in CFR Title 14 FAR Part §139.337 allow the WHMP to be promptly modified and updated to address new situations or changing circumstances. This plan provides Grand Junction Regional Airport with the discretion and capability to respond to these situations, while providing guidance for compliance with applicable federal, state, and municipal laws or regulations.

II. Purpose

Enhancing safe air carrier operations is a primary objective of the Grand Junction Regional Airport. Accomplishing this objective entails careful monitoring of all aspects of arriving and departing aircraft in the vicinity of the Airport, including potential wildlife hazards on and around the airport. As part of its on-going safety efforts, Grand Junction Regional Airport intends to implement and maintain a WHMP according to CFR Title 14 FAR part 139.337 to address potential wildlife hazards at the Airport and surrounding areas. In addition to addressing general wildlife hazards, this plan will discuss habitat modification, monitoring and responding to potential wildlife hazards.

III. Wildlife Hazard Assessment (WHA)

In accordance with Federal Aviation Administration requirements, the Grand Junction Regional Airport was required to complete a WHA due to the size and/or number of observed wildlife that has access to the flight pattern or movement area.

The WHA for Grand Junction Regional Airport was initiated in June 2007 and ended in May 2008. The WHA provided baseline data on wildlife hazards to aircraft/human safety by identifying hazardous wildlife and their abundance, movements, and seasonal distributions, as well as natural and human-altered wildlife attractants and land-use practices. The ultimate goal of the WHA is to provide recommendations for reducing wildlife hazards to human health and safety.

The foundation of this Wildlife Hazard Management Plan is the WHA.

Wildlife Hazards

I. Wildlife Attractants at Grand Junction Regional Airport

The following were hazards and related attractants identified in the Wildlife Hazard Assessment. These attractants identified were within 5 miles of aircraft movement areas.

Food

The following food sources and related wildlife attractants were identified at or in the near vicinity of Grand Junction Regional Airport:

- Seeds

Attract small insect insects, small/medium/large birds, and small rodents. Seeds are found in majority late summer through late fall.

- Small Mammals

Attract medium/large predators. Small mammals are found year round.

- Fish and Insect

Attract waterfowl, raptors, shorebirds, and swallows. Insects are found primarily in the spring/summer. Fish are primarily found in the spring/summer/fall.

- Birds

Attract medium/large predators. Songbirds are found primarily in the spring/summer/ fall. Waterfowl are found year round.

- Human Hand-outs

Primarily attract pigeons, red fox, and corvids. Human hand-out's are present year round.

Water

The primary sources of water found in and around Grand Junction Regional Airport include:

- Retention Ponds
- Irrigation Ditches (The Highline Canal)
- Various Low Collecting Areas

Cover

The following are types of cover and related attractants found at or in the vicinity of Grand Junction Regional Airport:

- Facilities/Structures

Airport facilities and structures include hangars, terminal building, lights, signs, fences, parked aircraft, and culverts. These facilities/structures attract primarily: pigeons, coyote, fox, sparrows, larks, corvids, and raptors.

- Open Water

Retention ponds and irrigation ditches are the primary open water areas. These areas attract waterfowl and shorebirds.

- Grass/Trees/Shrubs

Short grass and long grass, trees and shrubs are found primarily around fencing and buildings. This attracts birds, rodents, and small/medium/large rodents.

Miscellaneous Cover

- Miscellaneous cover primarily includes asphalt milling piles, culverts, and one abandoned tank. This type of cover provides species such as, fox, raptors, pigeons, swallows, and corvids places to loaf and nest.

II. Hazardous Wildlife Guilds at Grand Junction Regional Airport

The primary guilds of wildlife that present a wildlife-aircraft strike hazard are discussed further below. The guilds are discussed in rank order as measured by their contribution to the relative hazard presented by each guild. These guilds group wildlife species largely according to their behavioral characteristics, with a general parallel to taxonomic relationships (see below for specific discussion of each guild). This approach of grouping species is used because behavioral attributes can play a significant role in predisposing some species of wildlife to strike aircraft. In addition, information in the strike database rarely notes the species involved in strikes, but rather, uses general terminology (e.g., duck, sparrow).

The primary hazardous guilds at the Grand Junction Regional Airport are the following:

Larks

At the Grand Junction Regional Airport, this guild consists solely of horned lark. Horned lark are small sparrow like birds that generally feed solitarily or in small groups. Species in this guild are most common in the spring, summer, and fall. House finch and house sparrow are resident, and consequently they reach their greatest abundance in summer when large family groups are present. Birds in this guild are considered a threat to aircraft. These birds are attracted to weedy fields, grasslands and cultivated fields Sparrows tend to be a problem around structures more so than the others in the guild. Their bulky nests in the cavities of buildings, airplanes and potentially engines (when they sit for any length of time) and other structures create a fire hazard and additional cleaning maintenance. The build-up of droppings can present a health risk and nuisance.

Sparrows and Finches

This guild includes small grassland birds, primarily house finch and the introduced house sparrow, with smaller numbers of American and lesser goldfinches, and seven species of sparrow.

Species in this guild are most common in the spring, summer, and fall. House finch and house sparrow are resident, and consequently they reach their greatest abundance in summer when large family groups are present. Birds in this guild are considered a threat to aircraft. These birds are attracted to weedy fields, grasslands and cultivated fields Sparrows tend to be a problem around structures more so than the others in the guild. Their bulky nests in the cavities of buildings, airplanes and potentially engines (when they sit for any length of time) and other structures create a fire hazard and additional cleaning maintenance. The build-up of droppings can present a health risk and nuisance.

Ictarids and Starlings

This guild includes European starling, Brewer's blackbird, red-winged blackbird, tricolored blackbird, and brown-headed cowbird. This guild often forms mixed flock species. All species in this guild

are gregarious, especially in winter when they form mixed-species flocks numbering in the 5 to 50 individuals. Peak abundance of this guild occurs in the fall, when European starlings were found to be the most abundant species. At this time of year, they typically occur in large flocks in fallow fields and pastures. This guild is a substantial threat to aviation due to its propensity to form large flocks. In addition, winter roosts are a noise nuisance and their droppings damage buildings and property. Droppings that are allowed to build up can become a source for several infectious diseases.

Swallows

This guild is represented primarily by two species: cliff swallow and barn swallow. Swallows are summer migrants, with abundance in the late spring to early fall, with peak abundance in the summer months. Large post breeding flocks of swallows can occur in the late summer, particularly when abundant flying insect populations associated with agricultural fields. Swallows are common due to the abundance of flying insects. They tend to also use eaves, tunnels, crevices or cracks for roosting or nesting habitat. Swallows are commonly involved in aircraft collisions because of their aerial foraging habits, but do not pose a high damage risk because of their small size (USDA 2008). Additionally, mud-nests built by swallows can cause additional damage from falling debris and dropping.

Doves

This guild includes two species that commonly occur at GJT: rock dove (non-native feral pigeon) and mourning dove. Both species were observed, especially around fences, roadways, and buildings. Both species are commonly observed primarily during the summer, winter, and fall months, with a decrease in spring, when birds are less apparent due to breeding activity. Mourning doves tend to fly close to the ground near cover between feeding and roosting areas, while rock doves will fly at higher altitudes. Doves are considered a threat to aviation safety because of their loose flocking behavior and overall abundance.

Other Avian Species

Raptors, pheasant/quail, thrushes/shrikes, waterfowl, vultures, woodpeckers, corvids/ravens, flycatchers, and hummingbirds are seen occasionally around the airport property.

Mammals and Other Non-Avian Species

Presence of wildlife other than birds has potential to increase the risk of aircraft strikes. This risk is restricted to the AOA, because potential for aircraft to strike terrestrial animals would only occur if they are present on the airfield surfaces. Species other than birds seen in the AOA include coyotes, badgers, cotton tailed rabbit, and white tailed prairie dog.

Habitat Management

I. Structure Management

Structures provide cover and hunting perches for wildlife. If wildlife use is considered when a building is being designed, costly control measures can frequently be avoided. Buildings should not provide nesting, perching, or roosting sites for birds and should inhibit access by mammals such as rodents.

Airfield Structures

Airfield structures such as runway lights, ramp and taxiway signs, ILS towers, and light poles are used as hunting and loafing perches for birds such as hawks, starlings, and raptors. Structures found to routinely attract birds in a hazardous manner may be fitted with wire coils or porcupine wire (e.g., Nixalite).

Airport Buildings

Occupied and unoccupied buildings on the Airport provide shelter to wildlife. It has been found that occupied buildings may also provide human hand-outs. The Grand Junction Regional Airport will adopt a “No Wildlife Feeding” Policy, and post notices where necessary. Buildings that are found to provide shelter for hazardous wildlife will be regularly monitored. Areas in buildings that provide structures used as hunting or loafing perches for birds, will be evaluated, and wire coils or porcupine wire may be used to detract them.

II. Water Management

Grand Junction Regional Airport has stormwater detention facilities and irrigation ditches on and near airport property. These bodies of water have the ability to attract a moderate number of birds and mammals throughout the year. Open water on Grand Junction Regional Airport property will be monitored closely to ensure hazardous species do not acclimate to these sites. Temporary open water areas will be monitored by the Wildlife Management Personnel and removed if possible.

Water sources outside of Grand Junction Regional Airport property, including the Highline Irrigation Canal and all waters within 5 miles of the aircraft movement area, will be monitored, and Grand Junction Regional Airport will work with local agencies and landowners to help deter hazardous wildlife.

The management of airport stormwater detention ponds has been a topic of considerable discussion due to their ability to attract waterfowl and to contribute to increased nesting and waterfowl populations. At Grand Junction Regional Airport, a combination of environmental regulations and city ordinances, requires substantial volumes of runoff to be detained on site. Consequently, a system of large detention ponds have been constructed to support the City of Grand Junction’s Stormwater Containment Plan. When the detention ponds contain water, they will be continuously monitored to ensure hazardous species do not acclimate on site.

Temporary pools and ditches during the wetter winter and spring months, small depressions created by vehicles operating within the infield areas fill up with water for short periods of time and can attract birds and mammals. Grand Junction Regional Airport will discourage driving on the infield during periods of high precipitation to avoid ruts in the soil. Where ruts are found, Airfield Maintenance will fill and/or grade the damaged area. In areas where there are larger pools, the land will be filled or graded such that water consistently drains into ditches. Ditches will be appropriately sloped so that water does not pool and leaves the airfield in a reasonably short amount of time. Because varying site conditions, the management of waters on the Airport must be considered on a case by-case basis.

III. Vegetation and Food/Prey-Based Management

Vegetation Management

Grand Junction Regional Airport contains diverse vegetation types, some of which are highly attractive to wildlife. The most effective approach to reducing this attraction is to remove all unnecessary trees, shrubs, weeds and plants, and establish non-seeding or small-seeded grass with the AOA. Other than paved areas, grass will be the primary cover inside the perimeter security fence.

In addition, grasses that produce large seeds and are known to be attractive to wildlife will be avoided when planting new areas. Grass height will be kept short, between 3-6 inches to reduce insect abundance and shelter for small birds and mammals. Grass height will be maintained throughout the year, with the first mowing activities beginning when the infield is firm enough to allow equipment access and the grass is sufficiently long to merit cutting. When possible, grass will be mowed at night when birds are the most inactive and air traffic is reduced. Mowing is quite attractive to several species of birds and mammals because it exposes food sources such as rodents, insects, and seeds. If cutting is being conducted during the day and birds are attracted to activity, the mowing will stop until the birds have been successfully hazed from the area.

Landscaping at the airport can affect tourism, business, and the overall impression of the Grand Junction Regional Airport vicinity to visitors; therefore, landscaping needs to be aesthetically pleasing. It must, however, coincide with the airport's greater responsibility of air safety. In some instances, trees and bushes offer hunting perches, roosting and loafing sites, nesting cover, and food for birds and other wildlife should be removed. Species of particular concern are fruit, nut and berry producers because they can attract wildlife and in some instances provide escape cover. Grand Junction Regional Airport maintenance will monitor ornamental trees to prevent communal roosting. Such trees will be thinned or removed if necessary.

Food/Prey-Based Management

Fish, rodents, rabbits, insects, earthworms, and other invertebrates are highly attractive to many species of birds and mammals and should be controlled where feasible. Handouts, trash, and scattered debris also provide food for wildlife. The modification or management of a wide variety of habitats such as wildlife-attracting vegetation and the management of structures as habitat will reduce populations of potentially hazardous wildlife by limiting shelter, food, and prey availability.

Rabbits, mice, prairie dogs, voles and rats are attractants of hawks and coyotes, but will occasionally attract vultures and other predators. Grand Junction Regional Airport will monitor populations and will use a mix of vegetation management, water management, hazing, and lethal control.

Insects and other invertebrates (e.g., earthworms, spiders, etc.) may attract many species of wildlife at Grand Junction Regional Airport. Insect populations will be monitored periodically by Grand Junction Regional Airport staff to determine if they are present in sufficient numbers to attract wildlife. If control is deemed necessary, the Grand Junction Regional Airport wildlife management staff will select the best pesticide for control method. Habitat management will keep much of the prey population in check, but the airport will continue to monitor these populations for outbreaks.

Trash and debris are often responsible for attracting species such as pigeons and ravens. Grand Junction Regional Airport maintenance will continue to conduct trash and FOD (foreign object debris/damage) collection sweeps on the airfield, especially after high winds.

The Grand Junction Regional Airport will implement a "No Wildlife Feeding" Policy, and post notices

where necessary. The public or airport employees should not be allowed to feed birds or mammals around the airport. When people are observed feeding wildlife, Grand Junction Regional Airport wildlife management staff will discuss with them the problems caused by feeding wildlife. The Airport wildlife management staff will continually monitor all public trash facilities located within 2 miles of aircraft movement area, emphasizing heavier monitoring of trash facilities within the air operations area.

IV. Burrowing Animal Management

The Grand Junction Regional Airport has a variety of burrowing animal species that have been observed on the airfield. Species observed include red fox, coyote, and badgers. Due to their moderate size, these mammals could easily cause damage to an aircraft. These animals cross runways and taxiways to access new feeding grounds, dens, and watering areas. These animals also have the potential to cause other types of damage by chewing on airfield markings and digging holes underneath the perimeter fence.

Due to their adaptive behavior, burrowing animals are nearly impossible to permanently disperse. Therefore, additional control and deterrent measures must be established. According to the Wildlife Hazard Assessment, the best long term solution would be to construct a chain-link skirting attached to the bottom of the entire perimeter fence ran at a 45 degree angle on the outside, then covered with soil; along with a 10 foot “no-climb” 1-inch chain-link fence with 3-strand barbed-wire risers on the top. Due to the extreme cost to construct such a fence, the Airport, along with the USDA Wildlife Biologist, have identified acceptable alternatives to this measure:

Alternative #1: Increase other control measures; including increased wildlife patrols and increased habitat management efforts.

Alternative #2: When funding becomes available, fence the airport perimeter with 10 foot “no-climbing” 1-inch chain-link fence with 3-stranded barbed-wire risers on the top. When additional funding is available, add the chain-link skirting to the fenced perimeter. There are various types of acceptable skirting defined by the USDA. The most effective skirting measure is the four feet of chain-link fencing attached to the bottom of the above ground fence, ran at a 45 degree angle to the above-ground fence. Another type of skirting identified as acceptable, is the attachment of 4 feet of 2-inch chain-link fence, placed horizontal to the above ground fencing and then covered with 6-8 inches of dirt. The Airport will evaluate, with the FAA, what type of skirting is feasible and necessary when the funding becomes available.

Due to staffing shortfalls, the Airport will not be able to increase additional control measures. Therefore, the Airport will pursue Alternative #2. This alternative will be implemented as soon as funding becomes available.

Wildlife Control Measures and Procedures

I. Management Techniques and Procedures

Wildlife hazards are analyzed by wildlife management staff. Wildlife control staff will determine procedures and techniques that can be applied to resolve wildlife hazards. The Director of Aviation will evaluate each recommendation provided by wildlife control staff regarding wildlife hazards to determine the feasibility of its application at the airport. The primary focus of wildlife management at Grand Junction Regional Airport is habitat modification and removal of attractants. These two actions are highly effective at reducing land use by wildlife.

In conjunction with modifying the landscape to reduce its attractiveness to wildlife, direct control will be necessary to clear remaining wildlife hazards from the AOA and approach/departure paths. When applicable, wildlife control staff will utilize techniques of physical exclusion, habitat modification or harassment to reduce wildlife damage. In other situations, wildlife will be removed as humanely as possible by shooting, trapping, or applying registered pesticides and other products. In selecting the damage management strategy, preference would be given to practical and effective non-lethal methods. However, non-lethal methods may not always be applied as a first response to each problem. The most appropriate response could often be a combination of non-lethal and lethal methods, or could include instances where application of lethal methods alone would be the most appropriate strategy, such as when wildlife poses an immediate threat to aircraft and human safety.

A key to successful wildlife control is persistence and innovation. Techniques are selected based on safety, effectiveness, and practicality with regard to environmental and social considerations. Most control techniques retain their effectiveness when used judiciously and in conjunction with other methods. Some methods, such as pesticides or leg-hold traps, are only effective and legal for certain species and situations. Therefore, the methods used depend largely on the situation, location, and the species involved.

Additionally, personnel involved in direct control must consider the potential risks and diseases that contact with wildlife can carry and take appropriate precautions.

Grand Junction Regional Airport will implement all applicable reasonable and prudent measures and terms and conditions to protect threatened and endangered species.

Wildlife control techniques in this section are intended to remedy existing wildlife hazards and discourage or remove hazardous wildlife from the airfield vicinity to ensure aircraft safety by keeping the approach and departure airspace as safe as possible. This section includes descriptions of wildlife control techniques available to reduce hazards at Grand Junction Regional Airport.

Resources to be made available for implementation include:

An adequate supply of equipment for habitat management and wildlife control is kept on hand at GJT for use by trained personnel.

- 12 gauge shotgun and ammunition
- .17 and .22 caliber rifles and ammunition
- Cleaning kits for shotgun
- Personal Protective Equipment (safety glasses and hearing protection)
- Wildlife taxonomy reference

- Binoculars
- Latex gloves
- Garbage bags
- Gallon-size re-sealable sandwich bags
- “Prevention and Control of Wildlife Damage” reference manual
- “Wildlife Hazards Management at Airports” reference manual
- Personal cleaning supplies
- Freezer

Firearms and ammunition are stored in a locked gun cabinet within the Wildlife Management Office when not in use. Firearms are for the use of trained personnel only and stay in the control of Wildlife Control personnel.

- Non-Lethal Techniques

The use of newly developed, proven non-lethal methods will be implemented when appropriate. Relocation of wildlife often involves stress to the relocated animal, poor survival rates, and difficulties in adapting to new locations or habitats, or the animal may simply leave the area. However, relocation can be an effective method of reducing the risk of wildlife strikes when special-status species are involved. Relocation of sensitive wildlife, however, has been successful. Relocation will be done in coordination with Wildlife Management Staff and the Colorado Division of Wildlife (DOW). Wildlife Management Staff at the Airport will not solely determine if relocation is appropriate or necessary without the assistance of Colorado DOW.

Nest Destruction

Nest destruction is the removal of nesting materials during the construction phase of the nesting cycle and before the eggs are laid. Proper identification of the nesting species is required to prevent take of non-target species. Removing nests from trees will require safety precautions or special tools, such as ladders, to reach those heights. Prevention of nesting reduces the number of animals that imprint on the Grand Junction Regional Airport. This technique will most often be used for raptors and waterfowl species.

Animal Behavior Modification

Animal behavior modification includes any number of devices that deter or alter undesirable animal behavior. The following categories represent the different kinds of methods available and used at Grand Junction Regional Airport:

- Physical Exclusion Devices

Physical exclusion devices include spike strips, netting, floating deterrents, doors, and other devices that deter or prohibit perching or entry. These devices can be effective on a small scale, but are often cost-prohibitive on a large scale. Prevention is often the easiest solution. The objective is to discourage bird loafing and feeding activities and not cause bird injury or death.

- Auditory Scaring Devices

Auditory scaring devices such as pyrotechnics can be effective but birds quickly learn to ignore scaring devices if the birds fear of the methods is not reinforced with lethal tactics. These devices are labor intensive and must be maintained to be effective. When hazing birds with these devices, considerations should be made to minimize the risk of moving birds into the path of aircraft. All operations personnel needing to use pyrotechnics will be trained in their safe use and operation prior to use.

- Leg-hold Traps

Padded leg-hold traps are allowed for the protection of health and human safety. A leg-hold trap captures an animal by gripping its leg or foot. Leg-hold traps are either placed beside or, in specific situations, in travel ways being actively used by the target species. Leg-hold traps are mechanical capture devices composed of a pair of jaws, one or more springs, a base to which the jaws and springs are attached, and a triggering mechanism that secures the trap in a set position until it is stepped on by an animal. Padded leg-holds have a rubber covering that lines the jaws so as to reduce injury to captured animals. Placement of these traps is contingent upon the habits of the respective target species, habitat conditions, and presence of non target animals. To prevent non target captures, pan-tension devices are used to prevent lighter-weight animals from setting off traps. The target species at Grand Junction Regional Airport most effectively managed by leg-hold trapping is the coyote. Non-target animals captured in padded leg-hold traps or foot snares are released at site of capture unless it is determined by the Wildlife Management Staff that they will not survive. Conspicuous warning signs will be posted to notify alerting people to the presence of padded leg-hold traps. Traps will be placed at major access points when they are set in the field. Traps will be checked at least once every 24 hours.

- Lethal Techniques

- Firearms

Shooting is more effective as a dispersal technique than as a method to reduce bird densities when a large number of birds are present. Shooting is conducted with shotguns or rifles at Grand Junction Regional Airport. Shooting is normally used to remove a single offending bird. However, at times, a few birds may be shot from a flock, constituting a lethal method/harassment combination, to make the remainder of the birds move away and reinforce non-lethal methods. Shooting is a safe and effective means of removing mammals such as coyotes from Grand Junction Regional Airport. Shooting is selective for target species. Animals removed by shooting are killed as quickly and humanely as possible. Firearm use is very a sensitive and public concern because of safety issues and potential misuse. To ensure safe use and awareness, Wildlife Management staff who use firearms to conduct official duties are required to receive firearms safety training within three months of their hire date and a refresher course every three years afterward.

- Toxicants

Toxicants may be applied by qualified and licensed personnel in any circumstance when deemed necessary and where minimal non-target take can be guaranteed. Toxicants have varying levels of lethality for different species. The status and biology of threatened and endangered species will be considered when using these toxicants to prevent take of these species. Many of the toxicants listed below are restricted use pesticides and will only be applied by individuals licensed by the State of Colorado in accordance with all label instructions. Wildlife Management staff that use pesticides are

trained to use each specific material and are certified for the use of pesticides. Furthermore, all certified pesticide applicators participate in continuing education programs to keep abreast of developments and to maintain their certifications.

Zinc Phosphate: Zinc Phosphate is one of the most widely used rodenticides throughout the world. Zinc Phosphate can produce toxic effects from a single dose, but because of its offensive taste and odor, pre-baiting with untreated bait is usually required to achieve consumption of a lethal dose. Following ingestion of this compound, toxicity is produced through the transformation of zinc phosphate to phosphate gas in the stomach. Phosphate is a highly toxic gas that elicits its effect in the liver and lungs. Death usually results from asphyxia.

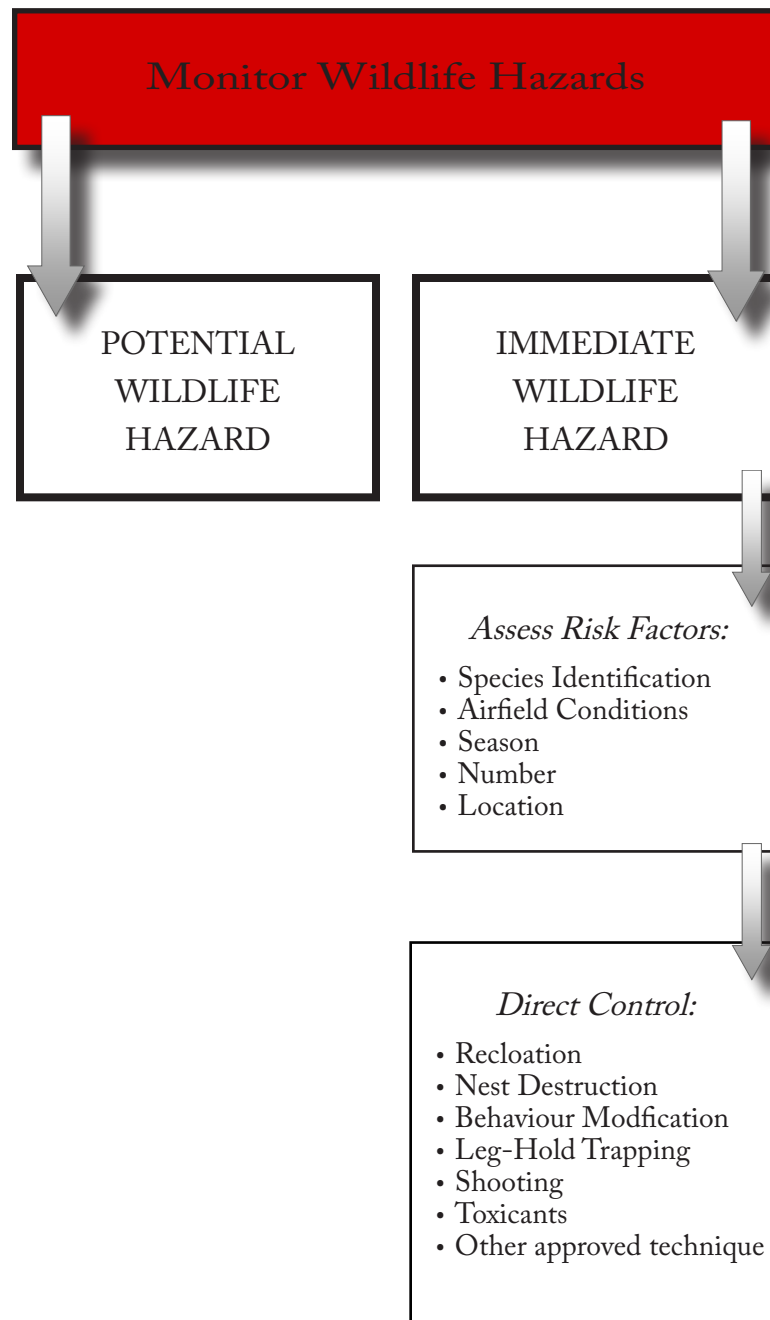
This toxicant would be used to target white-tailed prairie dog on the AOA. Zinc Phosphate has very little secondary toxicity; consequently eagles, hawks, falcons, or any other raptor should not be affected by consuming rodents that had expired from eating treated bait. Few carcasses are usually available since, rodents that consume the toxicant usually return to their burrows before expiring. Baiting should be conducted when prairie dogs are actively feeding.

Carbon Dioxide Gas: Carbon dioxide (CO₂) is a common euthanasia agent because of its ease of use, safety, and ability to euthanize many animals in a short time span. The advantages of using CO₂ are: the rapid depressant, analgesic, and anesthetic effects of CO₂ are well established; CO₂ is readily available and can be purchased in compressed gas cylinders; CO₂ is inexpensive, nonflammable, nonexplosive, and poses minimal hazard to personnel when used with properly designed equipment; and CO₂ does not result in accumulation of tissue residues.

Grand Junction Regional Airport
Priorities for Mitigation and Completion Dates

<u>Priority</u>	<u>Project/Mitigation Effort</u>	<u>Anticipated Completion Date</u>
1	Develop a Wildlife Hazard Management Plan	In-progress
2	Construct a fence around the entire AOA. In accordance with Alternative #2, described on page 8 of this plan, <i>“When funding becomes available, fence the airport perimeter with 10 foot “no-climbing” 1-inch chain-link fence with 3-stranded barbed-wire risers on the top. When additional funding is available, add a chain-link skirting to the fenced perimeter.”</i>	When funding becomes available
3	Begin wildlife mitigation through the use of toxicants (primarily for prairie dog mitigation).	04/01/2009
4	Revise documentation procedures for wildlife mitigation. Start and maintain a wildlife sighting and extermination log book. All data collected from logs will but in-put into a computer based log.	Completed
5	Adopt and enforce a “No Feeding” policy for all wildlife within the AOA. Hang informational signage at public trash facilities within the AOA.	10/31/2009
6	Personnel Training	On-going
7	Federal and Stat Wildlife Permits	On-going
8	Habitat Management	On-going
9	Encourage Adjacent Land Owners to Minimize Wildlife Activity	On-going
10	Work with cooperative agencies and groups to establish a Wildlife Hazard Management Working Group	01/31/2010

Flow Chart for Resolving Wildlife Hazards Grand Junction Regional Airport



II. Field Monitoring and Reporting

FAR Part 139.337 (b): “In a manner authorized by the Administrator, each certificate holder [must] ensure that a wildlife hazard assessment is conducted when any of the following events occurs on or near the airport:

1. An air carrier aircraft experiences multiple wildlife strikes;
2. An air carrier aircraft experiences substantial damage from striking wildlife.
3. An air carrier aircraft experiences an engine ingestion of wildlife; or
4. Wildlife of a size, or in numbers, capable of causing an event described in paragraphs (b)(1), (b)(2), or (b)(3) of this section is observed to have access to any airport flight pattern or aircraft movement area.”

Although it is impossible to accurately predict exactly how wildlife population dynamics will change over time or will be altered by the modifications to existing on-site habitat, changes should be anticipated. Long-term monitoring will be necessary to ensure that a hazardous situation does not develop. One objective of the mitigation projects is to eliminate habitat already known to be attractive to hazardous wildlife. Therefore, acceptable hazard levels will not be based on existing wildlife populations, but rather on population trends of hazardous wildlife on and near Grand Junction Regional Airport.

FAR Part 139.337 (b): “an assessment should be conducted after anyone of four triggering events occurs.”

Because one or more of these triggering events irregularly occurs at the Grand Junction Regional Airport, it is most prudent for the Wildlife Management Staff to conduct ongoing hazard assessments.

The on-going monitoring designed to detect and respond to any unforeseen wildlife hazards. In the event wildlife is observed that poses a threat to air safety, appropriate control methods will be immediately implemented, even though such actions may bias the survey data. This approach helps ensure aviation safety and yet still provides valuable data.

The record keeping and reporting is an important component to the management of hazardous wildlife. A log with habitat management, control techniques, and on-going assessment, record keeping and reporting can help distinguish wildlife patterns and help aid in the long-term management of hazardous wildlife. The Grand Junction Regional Airport will keep record of all wildlife taken by lethal means. The Airport will also record and report any wildlife found dead on any aircraft movement surfaces within the AOA. Wildlife Management Staff will keep an on-going record of all wildlife spotting with the AOA.

III. Wildlife Management Laws and Regulations

A number of federal, state, and local regulations affect wildlife control activities at airports. Wildlife control personnel are educated on the regulations pertinent to Grand Junction Regional Airport to ensure compliance. In general, harassing and/or taking most types of native wildlife are regulated through a permit process, overseen by federal and/or state agencies. Permits necessary for successful implementation of the airport WHMP will be obtained, as required, by the Grand Junction Regional Airport.

Federal Aviation Administration (FAA)

FAA is responsible for regulating air transportation. Regulations are codified in the Federal Aviation

Regulations (FAR's). FAA also publishes guidelines in AC's and periodically issues Certalerts and provides recommendations on specific issues for inspectors and airport personnel.

FAA 14 CFR – PART 139.337

The FAA rule pertaining to Certification of Airports was amended in February 2004 and effective in June 2004. FAA 14 CFR 139.337 addresses Wildlife Hazard Management. FAA 14 CFR 139.337 (b) requires airports that provide scheduled commercial air service to conduct a wildlife hazard assessment if any of the following events occur on or near the airport:

1. An air carrier aircraft experiences multiple wildlife strikes;
2. An air carrier aircraft experiences substantial damage from striking wildlife.
3. An air carrier aircraft experiences an engine ingestion of wildlife; or
4. Wildlife of a size, or in numbers, capable of causing an event described in paragraphs (b)(1), (b)(2), or (b)(3) of this section is observed to have access to any airport flight pattern or aircraft movement area."

The wildlife hazard assessment must include information on observed wildlife species, their numbers, locations, local movements, and daily and seasonal occurrences, as well as wildlife attractants on or near the airport. The study must also analyze the events that prompted it and the overall wildlife hazard to air carriers. As required by 14 CFR 139.337(d), the wildlife hazard assessment is to be used by the FAA, in conjunction with other relevant information, to determine if there is a need for a WHMP.

The WHMP, which is submitted to and approved by the FAA, must provide "...measures to alleviate or eliminate wildlife hazards to air carrier operations" by outlining necessary habitat modifications and wildlife control procedures and identifying those responsible for implementing the plan (Part 139.337(f) (1).

Advisory Circular No. 150/5200-33B - Hazardous Wildlife Attractants On or Near Airports

AC 150/5200-33B provides direction on where public-use airports should allow land uses that have potential to attract hazardous wildlife. The AC cautions that wildlife use of areas in an airport's approach or departure airspace, aircraft movement areas, loading ramps, or aircraft parking areas could cause conditions hazardous to aircraft safety. FAA recommends a distance of 10,000 foot separating wildlife attractants and aircraft movement areas. The FAA definition of wildlife attractants in AC 150/5200-33B includes human-made or natural areas, such as poorly drained areas, retention ponds, agricultural activities, and wetlands. AC 150/5200-33B recommends against the use of airport property for agricultural production within the General Zone unless the income from agricultural crops is necessary for the viability of the airport.

Advisory Circular No. 150/5200-32A - Report Wildlife Aircraft Strikes

AC 150/5200-32A provides guidance on reporting wildlife strikes to FAA, accessing the FAA National Wildlife Aircraft Strike Database and making use of the FAA's Feather Identification Program. Wildlife strikes may be reported to the FAA either using the Bird/Other Wildlife Strike Report (FAA Form 5200-7) or electronically via the Airport Wildlife Hazard Mitigation web site (<http://wildlife-mitigation.tc.faa.gov>). The FAA National Wildlife Aircraft Strike Database can be accessed through the same web site. The AC emphasizes the importance of accurate species identification of those animals involved in a strike and details procedures for sending samples to the Feather Identification Lab at the Smithsonian Institution, Museum of Natural History, when necessary, for species identification.

CERTALERTS

FAA periodically issues Certalerts for internal distribution and to provide recommendations on specific issues for inspectors and airport personnel. Certalert No. 98-05 (Grasses Attractive to Hazardous Wildlife) discusses re-vegetation with seed mixtures not attractive to wildlife and elimination of existing attractive grasses in disturbed areas at airports.

Certalert No. 06-07 (Requests by State Wildlife Agencies to Facilitate and Encourage Habitat for State- Listed Threatened and Endangered Species and Species of Special Concern on Airports). This Certalert, issued on November 21, 2006, recommends that airports follow prescribed landscaping and habitat management practices to discourage the presence of hazardous wildlife species even if the species is state-listed, and to not allow state-listed species to remain on the airport if doing so would require managing the airport environment in a manner contrary to FAA recommendations. The Certalert also specifies that wetland mitigation for stated listed species should be sited off-airport.

Memorandum of Agreement on Aircraft Wildlife Strikes

In July 2003, FAA, U.S. Air Force, U.S. Army, U.S. Environmental Protection Agency (EPA), USFWS, and USDA entered into a Memorandum of Agreement (MOA) to more effectively address existing and future environmental conditions contributing to aircraft-wildlife strikes. The signatory agencies agreed to strongly encourage their respective regional and local offices to develop interagency coordination to implement the MOA. The signatory agencies also agreed that whenever a significant aircraft-wildlife strike occurs or a potential for one is identified, any signatory agency may begin action with other appropriate signatory agencies to reduce the identified strike probability. The MOA directs the agencies to work cooperatively, preferably at the local level, to determine the causes of the strike and what can and should be done at the airport or in its vicinity to reduce potential strikes. It specifically recognizes mitigation for wildlife habitat as a hazardous wildlife attractant along with agriculture and golf courses, and states that these activities should occur outside of the 10,000 foot zone.

Nation Environmental Policy Act (NEPA)

The National Environmental Policy Act (NEPA) sets forth a federal environmental policy, requires federal agencies to consider and disclose environmental impacts of proposed actions, and encourages federal agencies to make environmentally responsible decisions. NEPA applies to all federal agencies and most of the actions they approve or carry out. After an action is determined to be subject to NEPA, the lead agency must decide whether or not a categorical exclusion applies. If not, the lead agency must determine whether the action would significantly affect the quality of the human environment.

Federal Endangered Species Act

USFWS has authority over projects that could affect the continued existence of federally listed threatened or endangered species. Section 9 of the federal Endangered Species Act (ESA) prohibits any person from “taking” an endangered or threatened fish or wildlife species or removing, damaging, or destroying a listed plant species on federal land or where the taking of the plant is prohibited by state law. “Take” is defined under ESA, in part, as killing, harming, or harassing. Under federal regulations, take is further defined to include habitat modification or degradation that actually results in death or injury to wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or sheltering.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) prohibits the take of any migratory bird or their parts (including feathers, nests, and eggs). Under the MBTA, take is defined as “to pursue, hunt, shoot, wound,

kill, trap, capture, or collect, or any attempt to carry out these activities.”Take does not include habitat destruction or alteration, as long as there is not a direct taking of birds, nests, eggs, or parts thereof.

Federal Insecticide, Fungicide, and Rodenticide Act

All pesticides used in the United States are subject to federal regulation under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), amended by the Federal Environmental Pesticide Control Act (FEPCA). These laws and other pesticide regulations also cover herbicides as, under federal regulation, an undesirable plant is considered a “pest.” EPA implements FIFRA and FEPCA. Key provisions of the laws include: prohibiting use of a pesticide inconsistent with the label; classifying pesticides as (a) general use or (b) restricted use; allowing states to license and certify applicators and to enforce the law; and requiring all products to be registered with EPA.

Wildlife Management Personnel Responsible for Implementation

Implementation of the WHMP can only be effectively accomplished with the collective efforts of many individuals and several agencies. One important group responsible for maintaining aviation safety on a daily basis is the Wildlife Management Staff at Grand Junction Regional Airport. This group consists of the Operations and Administration personnel and all other personnel certified to use firearms, pyrotechnics or trapping techniques to control hazardous wildlife in accordance with the applicable rules and regulation.

Currently the Airport provides staff, that is capable of managing wildlife, during all air carrier operation hours, including a half hour prior and a half hour after all commercial operations. The Airport feels that this staffing level is adequate.

Wildlife Hazard Management Working Group

The Airport will work to create a Wildlife Hazard Management Working Group (WHMWG). This group will meet on an annual bases to discuss wildlife management at the Airport. This group will include representatives from interested parties, including: airlines, airport tenants, cooperative agencies, air traffic control, and more. The primary task of this group will be to provide feedback to airport management personnel related to wildlife management at the airport and to review the Wildlife Hazard Management Plan annually.

Director of Aviation

- Review changes to and approves the WHMP.
- Maintain and coordinate with community contacts, especially in gaining community awareness of airport wildlife hazards and notification of their projects that are potential wildlife attractants.

Deputy Director of Administration

- Ensure the WHMP is consistent with the current CFR Title 14 FAR part 139.337.
- Implement the Administrative functions associated with the Wildlife Hazard Management Plan at Grand Junction Regional Airport.
- Maintain and coordinate with community contacts, especially in gaining community awareness of airport wildlife hazards and notification of their projects that are potential wildlife attractants.
- Coordinate and approve wildlife-related changes at Grand Junction Regional Airport.
- Ensure the WHMP complies with the Grand Junction Regional Airport Certification Manual per CFR Title 14 FAR part 139 and other mandates, procedures, guidelines and regulations applicable for maintaining FAA Certification.
- Ensure only properly trained and badged wildlife control personnel operate on the Airport in accordance with FAA regulations. Such training includes radio communications and driving on the AOA.
- Coordinate and provide planning support for the future of Wildlife Hazard Management at the Grand Junction Regional Airport.
- Coordinate and administer all finance functions related to the management of wildlife at the Grand Junction Regional Airport.

Deputy Director of Operations and Operations Supervisor

- Director of Operations and/or Operations Supervisor are the Wildlife Coordinators for the Airport.
- Ensure the WHMP is consistent with the current CFR Title 14 FAR part 139.337.
- Implement the Wildlife Hazard Management Plan at Grand Junction Regional Airport.
- Train, supervise, coordinate, and monitor activities of the Airport Duty Managers, Airport Specialists and contractors, especially with regard to the safe use of firearms and pyrotechnics.
- Disseminate information and assignments.
- Coordinate and approve wildlife-related changes at Grand Junction Regional Airport.
- Alleviate hazardous wildlife attractants deemed an imminent hazard.
- Coordinate the issuance of Notices to Airmen (NOTAM) pertaining to wildlife hazards.
- Monitor facilities and tenant concerns for wildlife problems (24-hour response).
- Keep a log of all wildlife strikes and control actions and forward reports to FAA as necessary.
- Make electronic wildlife strike report readily available to airfield operations and airlines for submission to the FAA National Wildlife Strike Database.
- Coordinate with airport environmental staff of all modifications to stormwater facilities, and/or on-site mitigation areas.
- Work with airport maintenance to alter wildlife habitat as needed to minimize hazardous wildlife attractants on Grand Junction Regional Airport property.
- Review plans involving land use change to avoid inadvertently attracting wildlife to the area.
- Obtain and maintain permits for wildlife depredation, harassment, capture, marking and relocation from federal or state wildlife agencies to control protected birds and mammals.
- Ensure the WHMP complies with the Grand Junction Regional Airport Certification Manual per CFR Title 14 FAR part 139 and other mandates, procedures, guidelines and regulations applicable for maintaining FAA Certification.
- Ensure only properly trained and badged wildlife control personnel operate on the Airport in accordance with FAA regulations. Training includes communications and driving on the AOA.

Airport Security Coordinator

- In the event, wildlife on the Airport becomes a security issue, the Airport Security Coordinator will be involved as directed by the Deputy Director of Operations and/or Operations Supervisor.

Airport Specialist III and II

- Log all known wildlife strikes on the online electronic strike report and forward the forms to the Director of Operations and the Operations Supervisor.
- Warn the air traffic control tower and pilots of imminent wildlife hazards.
- Insure wildlife-attracting refuse does not accumulate in fields and ditches on the airport.
- Inspect AOA for wildlife activity and strikes and maintain a record of the action, even if no wildlife was present.

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- Record all wildlife activity or animals dispersed or shot on the Wildlife Report.
 - Assist with wildlife control activities involving field rodents, rabbits, and bird abatement, and other programs.
 - Conduct runway inspections for dead or injured animals.
 - Collecting snarge (wildlife remains) from the Air Movement Area and aircraft.
 - Haze wildlife from critical areas when appropriate.
 - Maintain ditches and fields to ensure that water flows, thereby avoiding pooling and accumulation of refuse on the airport.
 - Assist with habitat modifications addressed in the WHMP, such as vegetation maintenance along ditches, brush removal, and tree pruning.
 - Install and maintain netting, wire grids, or other exclusion devices, over ponds, ditches, and other water areas as determined necessary by the Director of Operations and/or Operations Supervisor.
 - Maintain the perimeter fence to exclude mammals such as coyotes.
 - Pick up all trash and debris on the airfield.
 - Minimize pooling formed by rain on tarmac and infield areas; these areas will be graded if necessary.
 - Rodent-proof buildings, dumpsters, and other refuse containers to the extent feasible.
 - If certified, apply toxicants as directed.

Federal Aviation Administration

- Provide information related to aircraft-wildlife strikes and other wildlife incidents to the Deputy Director of Operations and/or Operation Supervisor.
- Assist Grand Junction Regional Airport in reviewing proposed land use changes, construction plans, and mitigation projects for potential wildlife hazards to aircraft.
- Provides funding for systems and equipment to obtain and maintain compliance.
- Review changes to and approve the WHMP.

Local Law Enforcement Agencies

The following agencies will provide on-demand support to the Airport when requested, or required due to laws, rules, and regulations governing the mitigation of certain avian and mammalian species:

Colorado Division of Wildlife & Colorado State Fish and Wildlife

NW Region Service Center

Address: 711 Independent Ave, Grand Junction, CO

Phone: (970) 255-6100

Mesa County Animal Control

362 28 Road Grand Junction, CO

Phone: (970) 242-4646

Wildlife Management Personnel Training


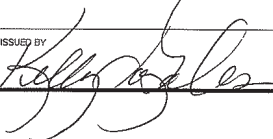
Training of all Wildlife Management Staff will be conducted on-site by staff trainers. Positions that will be involved in the training of personnel are indicated above the position responsibilities.

The Grand Junction Regional Airport will coordinate with the USDA to have Airport staff trained as Wildlife Hazard Management trainers. Staff identified and trained as trainers will develop, coordinate, and oversee all wildlife training efforts at the Grand Junction Regional Airport. Once training staff is trained, they will develop an annual training curriculum for all wildlife hazard management staff. This curriculum will follow the direction of AC 150/5200-36: Qualifications for Wildlife Biologist Conducting Wildlife Hazard Assessments and Training Curriculums for Airport Personnel Involved in Controlling Wildlife Hazards on Airports.

Training for all trainers and wildlife management staff will be conducted annually.

Appendix

Federal Fish and Wildlife Depredation Permit

		DEPARTMENT OF THE INTERIOR U.S. FISH AND WILDLIFE SERVICE		GRAND JUNCTION REGIONAL AIRPORT			
FEDERAL FISH AND WILDLIFE PERMIT U.S. Fish and Wildlife Service Migratory Bird Permit Office P.O. Box 25486, DFC (60154) Denver, Colorado 80225-0486 (303) 236-8171		FEB 25 2009		3-301 (1/97)			
1 PERMITTEE GRAND JUNCTION REGIONAL AIRPORT AUTHORITY 2828 WALKER FIELD DRIVE, SUITE 301 GRAND JUNCTION, CO 81506		2 AUTHORITY-STATUTES 16USD 703-712 REGULATIONS 50 CFR Part 13 50 CFR 21.41		3 NUMBER MB694040-0			
4 RENEWABLE <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		5 MAY COPY <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		6 EFFECTIVE 02/20/2009			
7 EXPIRES 12/31/2009		8 NAME AND TITLE OF PRINCIPAL OFFICER (If #1 is a business) TED BALBIER AIRSIDE MANAGER		9 TYPE OF PERMIT DEPREDATION-AIRPORT			
10 LOCATION WHERE AUTHORIZED ACTIVITY MAY BE CONDUCTED SAME AS ABOVE							
11 CONDITIONS AND AUTHORIZATIONS A. GENERAL CONDITIONS SET OUT IN SUBPART D OF 50 CFR 13, AND SPECIFIC CONDITIONS CONTAINED IN FEDERAL REGULATIONS CITED IN BLOCK #2 ABOVE, ARE HEREBY MADE A PART OF THIS PERMIT. ALL ACTIVITIES AUTHORIZED HEREIN MUST BE CARRIED OUT IN ACCORD WITH AND FOR THE PURPOSES DESCRIBED IN THE APPLICATION SUBMITTED. CONTINUED VALIDITY, OR RENEWAL OF THIS PERMIT IS SUBJECT TO COMPLETE AND TIMELY COMPLIANCE WITH ALL APPLICABLE CONDITIONS, INCLUDING THE FILING OF ALL REQUIRED INFORMATION AND REPORTS. B. THE VALIDITY OF THIS PERMIT IS ALSO CONDITIONED UPON STRICT OBSERVANCE OF ALL APPLICABLE FOREIGN, STATE, LOCAL OR OTHER FEDERAL LAW. C. VALID FOR USE BY PERMITTEE NAMED ABOVE and the following subpermittees are authorized (50 CFR 21.41(c)(5)): Ted Balbier, Jerry Jensen, Ross Smith, Rich Baker, Ed Storer and Amy Jordan. D. You and subpermittee(s) are authorized to take, transport and temporarily possess the following migratory birds to relieve or prevent injurious situations impacting human health or safety. All take must be done as part of an integrated Wildlife Damage Management Program that emphasizes the use of appropriate nonlethal management techniques. You and subpermittee(s) are authorized to use legal lethal take for the following: <table border="0"> <tr> <td> five (5) American Kestrels (<i>Falco sparverius</i>) twenty-five (25) Black-billed Magpies (<i>Pica hudsonia</i>) fifty (50) Canada Geese (<i>Branta canadensis</i>) twenty-five (25) Common Ravens (<i>Corvus corax</i>) seventy-five (75) Horned Larks (<i>Eremophila alpestris</i>) ten (10) Loggerhead Shrikes (<i>Lanius ludovicianus</i>) fifteen (15) Mallards (<i>Anas platyrhynchos</i>) </td> <td> fifty (50) Mourning Doves (<i>Zenaidura macroura</i>) five (5) Northern Harriers (<i>Circus cyaneus</i>) five (5) Red-tailed Hawks (<i>Buteo jamaicensis</i>) fifteen (15) Turkey Vultures (<i>Cathartes aura</i>) twenty-five (25) Western Bluebirds (<i>Sialia mexicana</i>) thirty (30) Western Kingbirds (<i>Tyrannus verticalis</i>) thirty (30) Western Meadowlarks (<i>Sturnella neglecta</i>) </td> </tr> </table> You and subpermittee(s) are authorized to take active nests (including eggs) of the following: fifty (50) Cliff Swallow (<i>Hirundo pyrrhonota</i>) nests E. All of the above species and numbers are totals for the year 2009. If the problem hasn't been resolved by the above authorized activities, then a <u>written request with justification to amend the permit</u> must be submitted to the issuing office for additional authorization. <input checked="" type="checkbox"/> ADDITIONAL CONDITIONS AND AUTHORIZATIONS ALSO APPLY						five (5) American Kestrels (<i>Falco sparverius</i>) twenty-five (25) Black-billed Magpies (<i>Pica hudsonia</i>) fifty (50) Canada Geese (<i>Branta canadensis</i>) twenty-five (25) Common Ravens (<i>Corvus corax</i>) seventy-five (75) Horned Larks (<i>Eremophila alpestris</i>) ten (10) Loggerhead Shrikes (<i>Lanius ludovicianus</i>) fifteen (15) Mallards (<i>Anas platyrhynchos</i>)	fifty (50) Mourning Doves (<i>Zenaidura macroura</i>) five (5) Northern Harriers (<i>Circus cyaneus</i>) five (5) Red-tailed Hawks (<i>Buteo jamaicensis</i>) fifteen (15) Turkey Vultures (<i>Cathartes aura</i>) twenty-five (25) Western Bluebirds (<i>Sialia mexicana</i>) thirty (30) Western Kingbirds (<i>Tyrannus verticalis</i>) thirty (30) Western Meadowlarks (<i>Sturnella neglecta</i>)
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12. REPORTING REQUIREMENTS ANNUALLY BY JANUARY 31 FOR THE PRECEDING CALENDAR YEAR							
ISSUED BY 		TITLE CHIEF, MBPO, REGION 6		DATE 02/20/2009			

Grand Junction Regional Airport
2828 Walker Field Drive, Suite 301
Grand Junction, Colorado 81506
www.gjairport.com