Liberty Wildlife Medical Services

Medical Services
Training Program

• Section Two •

Paperwork and Charting
Handling and Restraint

Liberty Wildlife, P.O. Box 14345, Scottsdale AZ 85267
Wildlife Hotline (480) 998-5550

Paperwork and Charting

Medical Services is probably the most paperwork-intensive volunteer area at Liberty Wildlife! But this communication flow is absolutely necessary to ensure the proper care for wildlife and to maintain the proper treatment and disposition information for the facility's permits and reports.

Paperwork records:

- When an animal arrives
- When an animal is assessed
- When an animal receives a treatment or exam
- When an animal receives a medication
- When an animal is fed
- When an animal is moved inside or out
- When an animal is moved from one outside enclosure to another
- When an animal is released, placed, euthanized, or dies

You will be responsible for recording information and following up with all paperwork correctly.

Starting the Medical Chart

Each arriving animal must have a medical chart completed upon assessment. The medical chart consists of three separate sections.

The first section contains the identification information on the animal, such as the species, date in, and the log number. The second section contains the condition of the animal upon check-in, any initial treatment administered, and a section for additional notes. The third section is the ongoing care log where treatments and condition reports are recorded.

Large birds, all raptors, mammals, or unusual animals are given 8 1⁄2 X 11 preprinted charts. Passerines and other small birds are given small blank cards for charts. These small cards can be easily attached to bins and small cages.

When an animal is a new arrival, the chart should be attached to the front of the cage with a "New Patient" tag so that the senior medical staff is aware of its arrival.

If an animal with a large chart is stable, the chart is placed in a medical file folder. The right side of the folder is for the chart itself. The left side of the folder is for supporting documents which include lab requests forms, lab results, x-rays, well care forms, and completed medication cards.

The medical folders are filed in the Intensive Care area. Small charts always stay with the animal when it is in Intensive Care.

It is important to make regular notations on the medical charts. These remarks will include progress of condition, treatments given, medications started or stopped, outside treatments such as X-rays, visits to specialists, or even behavior notations. Be sure to use language that communicates plainly and clearly. Write clearly at all times.

When animals are stable enough to be moved out of intensive care their movements must be recorded on the medical chart. Each chart should clearly indicate the specific cage where an animal has been moved.

Education animals have medical charts, too. They are kept in the three-drawer file cabinet in the bird room in the bottom file drawer. Items that should be recorded are any medical concerns or treatments, beak coping, talon trimming, jessing, behavior changes, cage movement, or any other information that might prove valuable to have on file.

Samples of large and small medical charts are included in this section for you to review.

Medication and Treatment Schedules

Animals often receive medications or regular treatments. In order to keep track of these procedures, a schedule is posted on the animal's enclosure.

Medication and treatment schedules are written on bright green index cards. The color is easy to identify, reducing the possibility of missing a scheduled treatment. Check boxes on the card indicate the number of days (showing dates) and the frequency. Also listed on the card are the species, log number, medication or treatment, dosage, method of administration, and any other pertinent information.

When a course of medication ends with the remark "Re-evaluate" discuss the animal's current condition with the Medical Services Program Coordinators to determine if the treatment should continue or be modified. If the course of medication is completed the card is removed from the animal's cage. For birds with larger charts, hole-punch the card and place in the chart in the fastener on the left-hand side. For birds with smaller charts, staple the card to the back of the chart, putting the staple in the far corner. A sample is included in this section.

The Food Chart

When any animal is given food, it must be recorded on a food log. This includes food that has been force-fed or hand-fed. Food intake should always be recorded on the food log, not on the medical chart. Each food log must have the species, date in, and the log number of the animal. Food logs are kept for large birds and mammals, or for animals on special feeding schedules such as doves needing to be tube fed.

A sample of a food log is included in this section.

Final Dispositions

We must record the final disposition of each animal that has come into Liberty Wildlife. This is usually the last notation in the medical chart.

An animal can have one of the following six different dispositions.

- Released - If an animal is returned to the wild, the location of the release site must be recorded as well as the release date and the person(s) releasing the animal.
- Transferred - If an animal has been transferred to another facility the name of that facility, its location, and the date of transfer are listed.
- Expired (DOA) - If an animal arrives that has already died, it is still logged in and recorded as DOA or dead on arrival.
- Expired (Died in 24) - If an animal arrives and dies within 24 hours of being checked-in, it is recorded as Died in 24.
- Expired (Died) - If an animal arrives and dies after 24 hours in the facility, it is recorded as Died.
- Expired (PTS) - If an animal is euthanized, it is recorded as PTS or put to sleep.

Animals that have expired should have the specimen location identified on the final disposition form. There are three options:

- DISF (dead in specimen freezer)
- DES (destroyed)
- DIFF (dead in food freezer).

When animals are placed in the specimen or food freezers a Final Disposition form should be included with the body. Pads of these forms are available which record the species, log number, date, and final disposition of each animal. When you put an animal in the specimen freezer, always log the specimen on the form located on the freezer door.

A sample of a Final Disposition record is in this section.

Electrocutions

We have a contract with Utilities Companies (APS and SRP) to take data on electrocuted birds. This data will hopefully prevent future electrocutions and provide data on how these birds are being electrocuted.

These specimens are handled by the Research and Conservation Team. Our job is to make sure these specimens end up in the proper place with the proper paperwork.

When they come to the window, the Utility Company representative will have the animal bagged and a copy of their paperwork. Ask them if they need a copy of the paperwork; if so, please make a copy for them. Take the paperwork and the bagged animal and put it in another garbage bag with the paperwork stapled to the original bag. Finally, place the specimen into the Utility Refrigerator and contact the Research & Conservation team to advise them that the Utility Company has dropped off a specimen.

LIBERTY WILDLIFE • FINAL DISPOSITION RECORD

Record Number 02-0001 Species GHO

Date of Final Disposition 9/13/02 Comments

☐ Released By ______ Phone ______

Location ______

☐ Transferred To ______ Location ______

☒ Expired DOA ___ Died in 24 ___ Died ___ PTS ✓

Specimen location DISF ✓ DES ___ DIFF ___

Pigeon N/N

259 g Red 78

Sulfatrim .5cc PO BID

9/16 ☐ ☐

9/17 ☐ ☐

9/18 ☐ ☐

9/19 ☐ ☐

9/20 ☐ ☐

9/21 ☐ ☐

9/21 ☐ ☐

FEEDING LOG

SPECIES GHO

LIBERTY NUMBER 02-0001

DATE IN 9/12/02

SPECIAL INSTRUCTIONS

DATE LOGGED	FOOD REMAINING FROM DAY BEFORE	TOTAL OF FOOD GIVEN FOR THE NEW DAY
9/12/02	Ø	250g chickenchunk
9/13/02	Ø	250 g chickenchunk

SAMPLE

Medical Log

Species Kestrel (Female)

Log Number 02-1111 Date In 9-4-02

Condition/Initial Treatment Down - dehydrated. Compound FX. (R) radius/ulna. No other significant findings. Eyes/Ears/Mouth clear. Cleaned wound & wrapped wing w/nitrofurazone/Telfa/vet wrap. Started on sulfatrim 1cc POBID 7days. Administered 6 cc warmed LRS. AMS

Additional Notes 669

Date	Comments
9/9/02	Swelling present. Removed wrap. Cleaned area. Reapplied nitrofurazone/Telfa/vet wrap. Monitor for swelling. AMS

Pigeon
259g.

SAMPLE CHART N/N
Red TB

9-16-02- Compound FX (R) carpo-metacarpus Eyes/Ears/Mouth clear. No other significant findings. Cleaned area & wrapped wing w/ nitrofurazone telfa/vet wrap. Started on prefatrin .5cc PO BID 7 days
AMS

M. Dove
50g

SAMPLE CHART 02-1111
Yellow 7

9/16/02. BAR. NSF. Eyes/Ears/mouth clear. Needs to grow
JTH

Liberty Wildlife Rehabilitation Foundation

02-3380

Drop off date: 9/17 Date obtained: 9/17

Your name (print clearly): DON ROGERS

Email address: DROGERS@COX.NET

Address: 4939 E. AIRE LIBRE

City: SCOTTSDALE State: AZ Zip: 85254

Daytime/Cell phone: 602-788-5200 Evening phone: _____

What was the situation (cat attack) hit by car, found on ground, etc.): _____

What has been done for this animal (food, water, medication, etc.): NOTHING

Major cross streets where animal was found: TATUM & BELL

How did you hear about Liberty? DEBBIE WILSON Have you been here before? YES

Would you like to make a monetary donation today to help wildlife? YES For what amount? 1,000

Would you be interested in becoming a volunteer? NO

*******Liberty Only*******

Species: HOUSE FINCH **Sex:** _____

Age (hatchling, nestling, fledgling, juvenile, baby, (adult)): _____

Rescue/Transport volunteer name: T. STEVENS Phone: 602-317-9320

Final Disposition (circle one) DOA Died in 24 Died PTS PTS in 24 (DISF DES DIFF) Date: _____

Transferred to: _____ Phone: _____ Date: _____

Released by: _____ Phone: _____ Date: _____

Liberty No.	Date In	Species	Origin Person/Place	Comments	Final Disposition
02 3375	9/16/02	M. Dove M F Age___	Jim Kaiser 6001 E. Rustin Rd Carefree 85377	Hit window	DIED, DOA, PTS——DIF, DES, FED Date ___ TRANSFERRED TO: ___ RELEASED BY: ___ Band No. ___ Location ___
02 3376	9/16/02	Western Bluebird M F Age___	1574 E. 26th Ln. #21 Apache Junction 85219		DIED, DOA, PTS——DIF, DES, FED Date 09.17.2002 TRANSFERRED TO: ___ RELEASED BY: ___ Band No. ___ Location ___
02 3377	9/17/02	M. Dove M F Age___	Lori Guttman 12347 E. Shangri La Scottsdale, AZ 85259	Hit Window	DIED, DOA, PTS——DIF, DES, FED Date ___ TRANSFERRED TO: ___ RELEASED BY: ___ Band No. ___ Location ___
02 3378	9/17/02	M. Dove M F Age___	Joseph Scherzer 10900 N. Scottsdale Scottsdale, AZ 85254	FOG	DIED, DOA, PTS——DIF, DES, FED Date ___ TRANSFERRED TO: ___ RELEASED BY: ___ Band No. ___ Location ___
02 3379	9/17/02	WHITE WINGED DOVE M F Age___	JOANNE SWANK 8168 E. ANGEL SPIRIT SCOTTSDALE, AZ 85255	FOG	DIED, DOA, PTS——DIF, DES, FED Date ___ TRANSFERRED TO: ___ RELEASED BY: ___ Band No. ___ Location ___
02 3380	9/17/02	House Finch? M F Age___	Don Rogers 4939 E. Aire Libre Scotts AZ 85254	Cat attack	DIED, DOA, PTS——DIF, DES, FED Date ___ TRANSFERRED TO: ___ RELEASED BY: ___ Band No. ___ Location ___

Liberty Wildlife Rehabilitation Foundation

Drop off date: _____ Date obtained: _____

Your name (print clearly): _____

Email address: _____

Address: _____

City: _____ State: _____ Zip: _____

Daytime/Cell phone: _____ Evening phone: _____

What was the situation (cat attack, hit by car, found on ground, etc.): _____

What has been done for this animal (food, water, medication, etc.): _____

Major cross streets where animal was found: _____

How did you hear about Liberty? _____ Have you been here before? _____

Would you like to make a monetary donation today to help wildlife? _____ For what amount? _____

Would you be interested in becoming a volunteer? _____

*********Liberty Only*********

Species: _____ **Sex**: _____

Age (hatchling, nestling, fledgling, juvenile, baby, adult): _____

Rescue/Transport volunteer name: _____ Phone: _____

Final Disposition (circle one) DOA Died in 24 Died PTS PTS in 24 (DISF DES DIFF) Date: _____

Transferred to: _____ Phone: _____ Date: _____

Released by: _____ Phone: _____ Date: _____

Liberty No.	Date In	Species	Origin Person/Place	Comments	Final Disposition
		____ M F Age___			DIED, DOA, PTS——DIF, DES, FED Date ____ TRANSFERRED TO: ____ RELEASED BY: ____ Band No. ____ Location ____
		____ M F Age___			DIED, DOA, PTS——DIF, DES, FED Date ____ TRANSFERRED TO: ____ RELEASED BY: ____ Band No. ____ Location ____
		____ M F Age___			DIED, DOA, PTS——DIF, DES, FED Date ____ TRANSFERRED TO: ____ RELEASED BY: ____ Band No. ____ Location ____
		____ M F Age___			DIED, DOA, PTS——DIF, DES, FED Date ____ TRANSFERRED TO: ____ RELEASED BY: ____ Band No. ____ Location ____
		____ M F Age___			DIED, DOA, PTS——DIF, DES, FED Date ____ TRANSFERRED TO: ____ RELEASED BY: ____ Band No. ____ Location ____
		____ M F Age___			DIED, DOA, PTS——DIF, DES, FED Date ____ TRANSFERRED TO: ____ RELEASED BY: ____ Band No. ____ Location ____

Paperwork Quick Reference

Animals are tracked through each step of the rehabilitative process at Liberty Wildlife. Proper completion of necessary paperwork is crucial. The list below outlines the paperwork process.

When an animal arrives:

Complete check-in form	On all animals
Prepare food chart	Raptors, waterfowl, mammals, birds being tube fed, or animals requiring monitoring
Prepare medical chart	Raptors, waterfowl, mammals use preprinted medical charts; Songbirds and other small birds use chart cards.

Complete as needed:

Medication schedules	Prepared when medications are being administered on bright green cards.
Treatment schedules	Prepared when regular treatments are needed such as soaks, bandage changes, physical therapy, etc., bright green cards.

When animals are moved:

Record on medical chart	Record exact location

Final dispositions:

Complete Final Disp. slip	All animals
Record on check-in form	On all animals
Record on medical chart	On all animals
Record in log book	All native wildlife
Record on body bag	All native wildlife

Handling and Restraint

Handling wildlife is not second nature! It is a skill, just like any other, that needs to be acquired. Both training and experience are required to help you develop the skills necessary for proper handling and restraint.

It is important to understand that secure restraint does not mean being heavy-handed. Keep in mind that these are living creatures. You can secure the animal and still be gentle. Think of a dog that is trained to use a "soft mouth" when retrieving. Gentle, gentle, gentle!

This section will cover the basic information you need to begin safe and informed interaction with wildlife.

We will discuss restraint equipment and the importance of using it correctly. Personal safety, including safety equipment and attire, are reviewed. The four types of handling are presented, along with the training procedure for each type. And, handling and restraint techniques for medical procedures are detailed, including notes on specific species.

Safety Review

Your personal safety is a crucial component of effective handling and restraint.

Take all necessary precautions to ensure your safety and the safety of others around you. Make sure you are completely comfortable with the material on safety that was presented in the section on Safety. Carefully review the material in this section on equipment and precautions.

Do not attempt any type of handling or restraint unless you have completed the necessary training on the procedure. Work with an experienced volunteer until such time as you are authorized to complete a procedure on your own.

Before attempting any type of handling or restraint be certain you are completely comfortable with the procedure and with the animal being restrained. Never attempt any type of restraint or handling unless you are personally comfortable with the circumstances.

Gloves

Use appropriately sized gloves for the bird and for you. Consider the size of the animal. Consider the distance the leg or head can reach. Consider the strength of the animal. And, of course, consider the species.

Always wear two gloves. In order to be prepared to react to any situation, you must be protected. Continue to wear both gloves throughout the procedure.

When dealing with possible infectious situations, do not reuse gloves without having them cleaned. Avoid contamination from animal to animal.

Rubber or latex gloves
Use rubber or latex gloves to protect yourself from dirt and disease. These gloves should be worn when preparing food or feeding, when handling small non-raptor infectious bird for procedures, or when the situation indicates this type of protection is appropriate. These gloves are available in latex and are sized (small, medium, and large) and are available in vinyl for people with latex allergies.

Small leather gloves
Small leather gloves are used for restraining small raptors such as kestrels, screech owls, burrowing owls, sharp-shinned hawks, and small waterfowl such as green herons. They will provide a small degree of protection for the hand, but do not provide coverage beyond the wrist.

Large leather gloves
Large leather gloves are used for restraining medium raptors such as great horned owls, red-tailed hawks, Harris' hawks, and large waterfowl such as egrets, black-crowned night herons, and great blue herons.

Eagle gloves
Eagle gloves are large leather gloves that are Kevlar-lined, providing better protection when working with very large or aggressive species such as eagles or ferruginous hawks.

Goggles
Goggles provide protection for your eyes and must be used when working with herons, especially great blue herons. They also should be worn in the outdoor enclosures. When you are wearing goggles, keep them on. One person should be fully protected to react to any situation and that person should be the handler. If you wear glasses normally, goggles can be worn right over the top of them.

Restraint Equipment

Towels
Towels are often used as a substrate during procedures to provide a non- slick surface on which to work. They are also used to aid in restraint.

A towel can be wrapped around a bird's body to keep the wings from flapping. This is particularly useful in large birds with powerful wings or large wingspans. Towels can also be used to drape over the head of the animal. This aids in restraint by providing a dark environment for the animal, helping to calm it. A large towel can be used to initially secure an animal by holding it open as a visual barrier between you and the animal. When its vision is blocked you can safety drop the towel over the animal's head and body.

Hoods

Hoods are used to cover the head of the animal, which can help calm it. Hoods are commonly dark cotton drawstring bags, which cover the head and secure around the neck. It is important not to pull the drawstring too tight as you can restrict breathing. You should be able to put a finger easily between the bag and the neck of the animal. Custom hoods can be made of tooled leather and shaped to the animal's head. These hoods allow for easier breathing; however, they must be hand-tooled and fitted to each animal. Leather hoods are available for the eagles.

Booties

Booties are small drawstring bags that cover the foot and talons of a bird. They work by reducing the animal's ability to open its foot. Depending on the "fit" of the booties, an animal can still grab to some degree so caution must still be used. Be sure to secure the booties with the drawstring, but do not pull the string too tight.

Anesthesia

Anesthesia can be used for restraint. Medical procedures with restraint times greater than five minutes or those requiring full access to the animal during restraint (limiting the handler) may be candidates for anesthesia. As with any medication, there are risks involved with administering anesthesia. These risks must be carefully evaluated. The condition of the animal must be thoroughly assessed to determine if the drug can be tolerated. Anesthesia is commonly available in an injectable form or as an inhaled gas and is administered under the direction veterinarians by experienced medical staff.

Get creative, but be reasonable

Do what you must to provide secure restraint, but use common sense. Always remember, first, do not harm! Continue to carefully monitor the animal during any type of restraint.

Types of Handling

There are four types of handling that you will experience as a Medical Services volunteer. They are used for:

- Medical procedures
- Capture
- Movement and care
- Education wildlife

Each requires a different type of training. In this section we will first review the techniques for the last three handling types, followed by an in- depth discussion and workshop and the handling techniques for medical procedures.

Capture

Capture is the process used by Rescue and Transport volunteers to initially obtain an animal in the field. The goal of the capture process is to quickly and safely secure the animal for transport to Liberty Wildlife. Assessment is not done at this time, just capture, containment, and transport.

Training on capture techniques is provided through the Rescue and Transport group. You may need to use these skills should an animal escape from its enclosure.

Classes on Rescue and Transport are taught at Liberty Wildlife. After attending the class, add your name to the Rescue and Transport list and respond to as many rescues as you can. It is the actual experience in the field that will increase your skill level. You must complete the Rescue and Transport class to be signed-off on your Medical Services training.

Movement and Care

You have already learned that wildlife don't understand that you are there to help. Every contact with a wild animal is perceived as a threat and it is up to us to make this perceived threat as quick and as low-stress as possible.

Animals will need to be moved. This is an unavoidable part of providing care. When an enclosure in Intensive Care needs to be cleaned, the animal must be removed. When animals in the Intensive Care area have completed their medical treatment, they are moved outside to larger cages or flight enclosures. The Daily Care volunteers are well versed in these processes and have systems in place to make these necessary contacts effective yet brief, accomplishing the transport safely and with minimum stress to the animal.

The Orphan Care group also must move and provide care for the animals. These small birds must be handled when they are fed, when their enclosures are cleaned, and when they are transferred to outside aviaries.

When healthy animals, large or small, are ready for release, they must be moved into a carrier so they can be transported to the release site.

Keep these points in mind when handling an animal for movement or care:

- Protect yourself
- Protect the animal, adjusting to its injury
- Be aware of your surroundings
- Minimize contact
- Have your next action planned
- Anticipate what the animal will do
- Avoid escapes
- Expect the unexpected
- Think quick!
- Lead with your hands, not with your face

The techniques used in Daily Care and Orphan Care are important tools for every Medical Services volunteer to learn. To schedule a training session, contact the Daily Care and Orphan Care coordinators. If you are already actively volunteering in an area, you may have already received this important training, and may not need to repeat it. It is best to complete some Daily Care and Orphan Care training to better your skills for the Medical Services program.

Education Handling

Liberty Wildlife has birds on the premises that are used in educational programs. These birds were once injured and are not able to be released back into the wild. Because of this, educational animals have their own challenges. Most have an injury or other problem that may require ongoing medical attention.

For example, an amputation site can leave feather shafts exposed unnaturally, a potential hazard when blood feathers are coming in. Imprinted animals can exhibit unusual behaviors that can cause feather plucking or aggression. As some of the animals have been with us for years, conditions can arise that are due to old age that are seldom seen in the wild where survival of the fittest is the norm.

It is important to become familiar with the educational wildlife at the facility before you will need to treat them. Study each individual. In the medical reference materials, you will find *Audubon's Encyclopedia of Birds*. Look up the species and read everything you can find. It is important to understand each bird's feeding habits, nesting or migrating patterns, behavior, and normal sizes and weights. Then study the medical files that are kept on each animal.

We have generated a checklist of the educational wildlife to help you learn. This is a self-guided study program. Feel free to ask questions or ask for additional help as you review each case.

Volunteers in the Education Department have been trained to work with these animals in order to accompany them to educational programs in the schools or community. In turn, these animals have been trained or manned for use in education programs. These animals are assigned levels which correspond to their particular training level and the degree of experience needed by the Education handler.

Since it is important that these educational ambassadors are handled by methods they expect, the Medical Services staff must work closely with the education team or experienced staff so not to traumatize an education animal. This will retain the trust that has been established and nurtured between the birds and their handlers.

Painstaking work and patience have gone into the training (manning) of these birds. In the classes on handling you will learn the proper methods for interacting with manned birds and, equally as important, discuss understanding and respect for the animals' point of view.

In additional to normal educational handling, the educational animals need *medical* handling when they receive regular medical checks. This is accomplished by bringing the bird into an unusual location before it is "grabbed" so it will not be wary of rough handling its normal day-to-day procedures.

Handling and Restraint for Medical Procedures

This last type of handling is the type you will use most often. Correct handling and secure restraint are the keys to quick, yet thorough, examinations, treatments, and other medical procedures.

Responsibilities of the handler

Secure animal

This is your first priority. If the animal is not secure, proper medical treatment is difficult, sometimes impossible. Treating an unsecured animal is dangerous to the handler, to the person treating the animal, to others in the room, and to the animal itself.

YOU are the last chance

In rear-end automobile collisions, traffic tickets are traditionally issued to the person in the back car. It is assumed that he or she had the last real chance to control the situation. The same concept applies here. You, as the handler, have the last real chance to control the situation. Don't allow a person or an animal to become injured. Take your responsibility seriously!

Communicate

Vocalize! If you are losing your grip, say so. If you are uncomfortable with a restrain situation, speak up. If you are feeling light-headed or faint, let someone know immediately. It is important to maintain good communication during all procedures. Good communication is crucial for a quick and successful treatment.

Be Informed

Of course, it is important to know the species you are working with prior to reaching in a cage or box. It will make quite a difference if you are reaching for a dove versus a hawk! It is equally as important to research the condition of your animal carefully before you reach for it. If an animal has a broken leg, you would handle it differently than if it has a broken shoulder.

Observe carefully

Watch the animal and your co-workers carefully during all procedures. It is tempting to become involved in the medical process. Don't! Your attention must be 100% focused on the task at hand. This doesn't mean you are just watching the animal. Watch others, too. Make sure they are not in jeopardy.

Be aware

Make sure you are comfortable while restraining, but don't let down your guard. An animal can sense relaxation in your grip and take advantage of it.

Secure, don't squeeze, choke, or smother

An animal that is securely restrained can still breathe easily and circulate blood through its system. You can kill an animal by holding it incorrectly.

Offer and accept help

If you see someone doing a treatment, offer your assistance to hold or help. If someone offers their help to *you*, accept it! Many situations can be done easier and with less stress when you have help.

Avian Restraint Techniques

Obtaining the Animal

When you must handle a bird, know what you are reaching for. Get a good understanding of the animal's condition if it is available. If you cannot predict the condition, as is the case when conducting an assessment, restrict the animal's movement as much as possible so as to limit the risk of further injury.

When you are getting an animal out of a cage or a box, first locate the position of the animal. Quickly, but gently, reach for the animal with the appropriate precautions and actions for the species. *Only after you have control of the animal should you remove it from its enclosure.*

It is crucial to restrain a bird's wings immediately upon moving an animal from a cage or box. Continue to hold wings in as you move the animal to another cage or a treatment area. Loose wings can be a danger to both the bird and to others. Flapping can further aggravate an injury or cause unnecessary trauma to muscles. Birds that are very young can break blood feathers or cause other damage to growing feathers. Also, wings can hit people causing injury to the head, face, or other areas. Wings on large, strong birds can knock a person hard enough to stun them.

Keep hands, fingers, and other body parts clear of talons and beaks, too. A bird that might normally just use its feet for defense may resort to its beak when it discovers it is restrained. Always be prepared.

Raptors and Other Large Birds

These birds are usually controlled by keeping one hand on their legs and feet, and the other on their head, beak, or shoulders.

When you hold a bird by its legs, always keep a finger between the legs. This provides additional cushion for the bird and more security for you as the handler. Hold in the middle of the leg just above the hocks for the most stability. Hold the legs in one hand with your index (pointer) finger between the legs. Wrap your thumb around one leg and the remainder of your hand around the other. Close your hand and keep it closed. Your hand should not be squeezing the legs of the animal, but rather should be securely closed on itself. If you have your hand positioned correctly, the animal cannot slip its feet out of your grip. You should be able to cover the feet with your gloved hand.

You can now place the other on the back of the bird to provide additional support. If the beak of the bird is long and pointed, hold it directly. If you have a hawk or other raptor, hold the head by circling one hand around the back of the neck.

Never hold a bird or put pressure across the front of the neck. If you must secure the wings, drop your hand a little lower on the back so that you are holding in the shoulders. The subtle differences in these methods will become clear to you as you practice

Small Birds

Small birds are escape artists! They can take advantage of any lapse of technique or attention and wiggle out of your grasp.

Hold a small bird in your hand so that your hand is across its back with its head sticking out between your first and second fingers. It is very important to position your hand correctly so that you do not impair breathing. With your hand you can hold the animal's feet, again keeping a finger between the legs.

If the bird is attempting to bite, you may have to shift your hand so that your thumb is against one side of its head to prevent it from twisting and biting.

Types of Medical Holds

Foot Procedures

When holding for foot procedures, particular care is needed to secure the animal. This is particularly important with raptors, as an unsecured animal could easily close its talons on a nearby hand.

Prepare the table for a procedure by placing towels on the surface. Next, place the bird on its back on the table. The bird can be hooded or you can cover the bird's head to help calm it, but be sure to allow enough space and movement for normal breathing. While wearing long gloves, place the bird so that its head is closest to you and its wings are between your forearms. If the bird is large or strong, you will need to wrap its body in a towel to help secure the wings.

Place one foot in each hand. This allows you to handle the feet separately. You will need to hold the foot that is being treated high on the leg to provide access for the caregiver. If you can, fully extend the leg, as the animal seems to have less strength in this position.

When one foot is being worked with, place a well-gloved finger across the pad of the other and encompass it completely with your hand. This leg can then be folded safely away from the treatment area. Remember, monitor the situation constantly and voice any concerns you have. Communication is critical during foot procedures.

Wing Procedures

When holding a bird for a wing procedure, it is important to provide easy access for the caregiver. The animal should be held in an upright position with the wing that is being treated facing the caregiver. It can be hooded to help keep it calm during the procedure.

Take precautions to make sure the bird does not flap its injured limb as this could exacerbate the injury.

Head Procedures

When holding a bird for an examination or treatment of the head, you will need to secure the body and feet with one hand and the head with the other. The easiest way to hold the head is to encircle the animal's neck from the back. Do not squeeze but rather lift lightly on the head to seat it in your hand. Applying this light pressure will keep the animal in the correct position. Take precautions and communicate clearly to avoid being bitten.

Body Procedures

It is difficult to hold a bird for an exam of the body. You have to secure the feet, head, and wings, and yet provide access.

The simplest way to hold for a body exam is to constantly readjust your hold as the caregiver moves from area to area. Again, this requires good communication. As with feet or wing procedures, hooding the animal can help to keep it calm.

If It Happens ...

Despite everyone's precautions, there have been times when people have been "footed" by raptors. These powerful birds use their feet for catching prey and have the ability to "hang on" with an amazing tenacity.

Should you be "footed", the first thing to do is to remain calm. Do not try to pull out your hand, as this may cause further damage.

Remember, the bird is defending itself and trying to get away. If it has the option of escape, that is the choice it will make. The childhood agreement we all learned, "You let me go, I'll let you go," applies here! Communicate your action to others and allow them time to clear the area. Then, turn the bird away from you and toss it gently away from you. It will think that it is "flying" away and will usually release its grip in the process. It is a much easier task to recapture a bird than to forcibly remove one from a body part.

Raptors often leave puncture wounds which might seem small but can be very deep. Contact your personal physician or local human medical center immediately for instructions and treatment.

Specific Species

This section provides additional information on specific species.

Kestrels

Kestrels are small falcons. They are high-strung and very vocal. In spite of their small size, kestrels can be dangerous. Their sharp, needle-like talons seem to have developed a second sense as to the whereabouts of your cuticle – a very painful lesson to learn. Also, they bite readily, causing the handler to be constantly aware of two ends at once! To remove a kestrel from its cage, enter from the small door with gloved hands. A small net or towel can be helpful. Kestrels can be escape artists, so stay alert!

Sharp-shinned Hawks

Sharp-shinned hawks are accipiters – quick, darty fliers that earn each meal by capturing other birds. This ability makes them hard to capture and quick to dart out of even the smallest of openings.

Cooper's Hawks

A slightly larger twin of the sharp-shinned hawk, the Cooper's hawk is also an accipiter. It's quick, darty flight give it the ability to escape through even the smallest opening.

Screech Owls

Like most owls, screech owls seem to be slow moving. They will have sharp talons however and will use them to defend themselves.

Barn Owls

These beautiful light-colored owls not only have sharp talons and beaks, they also have a loud, ear-piercing scream which can hurt your ears! The embodiment of "born to be wild", these animals seem wild and aggressive from day one. They tend to fly right at you if they have no other option of escape.

Great Horned Owls

This "tiger of the skies" is one of the strongest birds of prey, second only to the eagle group. Its long sharp talons can exert a pressure of about 80 PSI. Despite this strength, the great horned owl tends to be a calmer bird and will often appear to stoically tolerate handling. Do not let down your guard though; they did not get their nickname without good reason!

Red-tailed Hawks

Red-tailed hawks can be very aggressive at times. They are a large hawk and have the ability to react quickly. Their talons are extremely sharp and long. It can also bite with its sharp beak. These hawks will often jump at the door of their cage when you approach. When moving a red-tailed hawk from its cage, it is important to move quickly and assertively, before it can react.

Harris' Hawks
Similar in size to the red-tailed hawk, the Harris' hawk has one big difference to note when handling. The Harris' hawk has a much longer reach with its legs, not only forward, but also from side-to-side. The talons on this bird are extremely long and sharp and it can react quickly and will often jump at the door of the enclosure.

Ferruginous Hawk
The ferruginous hawk is the most aggressive of the buteo group. A quick look at its short talons and toes can be very misleading to a handler. These birds require an experience handler for any movement or procedure.

Eagles
Do not attempt to move, treat, assess, or in any way approach an eagle without the specific direction of senior Medical Services staff. Eagles are extremely strong and dangerous. The golden eagle can exert between 200 to 300 pounds of pressure in just one foot and can ratchet their foot closed, holding that pressure constant. Bald eagles are extremely aggressive and will not hesitate to take advantage of any lapse in technique or protocol.

Green Herons
Although small, the green heron can still be a danger to eyes for someone unprotected or unaware of their ability to extend their neck.

Black-crowned Night Herons
These birds are extremely aggressive and can extend their assumed reach by about 10 inches! Take special care when handling these animals. Wear protective eye wear in addition to the appropriate gloves.

Great Blue Herons
If you have ever watched great blue herons fishing, you know first-hand the precision with which they can strike with their beak. They do strike for the face and eyes so it is crucial to wear protective eye wear and constantly maintain a secure hold on their beak. The legs on a great blue heron must also be restrained as they hang down quite far and can produce nasty scratches on the handler or others in the area.

Geese
Although they are waterfowl, geese act very differently than ducks. Geese are also aggressive and very strong. One good hit from their wings can cause a person to see stars. It is important to make sure you have secured their wings during *any* type of handling.

Dickie Birds
Small passerines and doves tend to stress easily. Although they are not usually a danger physically to the handler, extreme caution must be taken to protect these delicate creatures. Do not hold too tightly and monitor their reactions closely.

Mammals

Do not attempt any contact with mammals without the approvals and precautions that are defined in the mammal protocol. Do not handle bats under any circumstances. See the bat and mammal protocols in Section One for further information.

Reptiles

Do not attempt any contact with reptiles without the approvals and precautions that are defined in the reptile protocol. See the reptile and venomous reptile protocols in Section One for further information.

Juvenile Turkey Vulture or Adult Black Vulture?

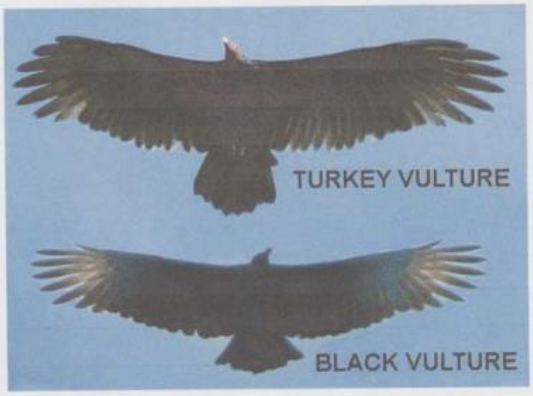
Juvenile Turkey Vultures take 2 years to develop their adult coloration. Birds less then 1yr old have distinctly browner cast to their body plumage. Their heads are the color of soot and covered with fine brown fuzz. The wrinkles, wattles and warts that individualize The adults aren't present in young birds. The neck ruff lacks the irridescense of adult birds. The beak is dark with an ivory base. As the bird passes it's first birthday the head turns pink and the beak turns a two tone cream with a dark tip.

Juvenile Black Vultures are similar to adults but have black heads rather than the gray heads of the adults. Their heads lack the wrinkles of the adults and are covered in soot covered down. The beaks are dark without a pal tip. The dark body plumage lacks the sheen of the adults

Juvenile and adult Turkey Vulture

Juvenile

Black Vulture



Lesser Nighthawk







Nighthawk **Poorwill**

- Nighthawks have longer, thinner wings with a white bar across the tip, and a longer tail.
- Poorwills have more pronounced bristles extending laterally from the base of the bill

Common Poorwill




Raven or Crow?

	Crow	Raven
Feathers	Less shiny, may have lighter markings	Shiny and wet sheen
Bill	Smaller and flat. There is no tuft of hair atop the bill.	Bigger, more powerful and curved. There is a tuft of hair atop the bill.
Size	Smaller; the size of a pigeon; 17 inches long (approx.); weight around 20 oz	Larger; almost the size of Red-tailed Hawks; 24-27 inches long; Weight around 40 oz
Wings	Blunt and splayed; wingspan 32 to 40 inches	Pointed wings; wingspan 46 to 54 inches
Life span	8 years	30 years
Adaptive skills	Like being in human populated areas; more social and audacious	Drawn to carrion cattle and sheep; less social, more cautious
Vocalization	Caw- Caw; nasal, high pitched call	Gronk-Gronk, croooaaak; low and hoarse
Habitat	Northern AZ, tend to stick to elevations between 5,200 and 9,500 feet	Widespread through all of AZ
Tail	Fan-shaped	Wedge-shaped

White Throated Swift

Adults have black back, wings, and tail.White throat, belly, and sides of rump. Body is cylindrical. Wings are long, pointed, and swept back. Juveniles are similar to adult, but duller



Swift


Swallow

Cliff Swallow

They have metallic, dark-blue backs and pale, pumpkin-colored rumps. They have rich, brick-red faces and a bright buff-white forehead patch like a headlamp. Some juveniles show whitish throats in summer and fall.



Ash Throated Fly Catcher

Adults have a long rusty tail and short, bushy crest. They are back brown with a pale gray throat and chest. The belly is pale yellow. Juvenile similar to adult, but paler, with buffy tips to wing feathers, and more reddish brown in tail.



Lesser Goldfinch and Verdin

Juvenile Verdin

Juvenile and Adult Verdin

Juvenile Verdin

Juvenile and Adult

Lesser Goldfinch

Verdin

Lesser Goldfinch

The lesser goldfinch adult grows to 3.5 – 4.7 in
The Verdin adult grows to 3.5 – 4.3 in

Lesser Goldfinch juveniles and females have olive backs, dull yellow underparts, and black wings marked by two whitish wingbars.
Adult males are bright yellow below with a glossy black cap and white patches in the wings; their backs can be glossy black or dull green. They have a black tail with large, white corners

Verdin juveniles are Plain gray, including face. Base of bill pinkish yellow.
Both male and females adults have a gray body and yellow face

Handling Checklist

Remember, Observe!

Your keen powers of observation can be your most important tool during restraint. As you hold, constantly monitor the animal's condition, its position, and the location of others in the area.

Monitor the animal

Is the animal too stressed?
Is the animal breathing too hard?
Is the animal gasping?
Is the animal's color pale?
Is it still completely restrained?
The animal should be upright and comfortable whenever possible.

Just as important, monitor your handling position.

Where are your hands and arms?
Are you keeping clear of the airway?
Are you covering the nares or mouth?
Are you restricting the animal's breathing?
Are you leaning on or against the animal's body?
Are you squeezing or holding too tight?
Are you impairing circulation?
Your handling should be gentle, yet secure.

Are others in jeopardy?

Where are others in the area?
Are others reaching across the work area?
Are others leaning too near the animal?
Are others hands or other body parts in danger?
Communicate any concerns you have immediately.

Constantly re-evaluate!

You will move, the animal will move, and others will move. Safe and secure handling and restraint means that you must constantly re-evaluate the situation and your technique.

Medical Services Exam

Section Two: Handling and Restraint

Note: Multiple choice questions may have more than one right answer. Circle all that apply.

1. What are the four types of handling?
    a.
    b.
    c.
    d.
2. List five of the many responsibilities of the handler during a medical procedure.
    a.
    b.
    c.
    d.
    e.
3. List five types of equipment that are used during restraint for a medical procedure and describe how each is used.
    a.
    b.
    c.
    d.
    e.
4. Before removing an animal from its cage what should you do?
    a. Prepare yourself with the proper equipment
    b. Have others leave the room
    c. Check what is in the cage
    d. Review the chart to determine its injury
    e. Weight the animals
5. What is the procedure used to remove a raptor from its cage?
    a. Hold one leg in each hand
    b. Circle both legs completely into one hand
    c. Place one hand so that you are holding in the wings
    d. Circle both legs with one finger between the legs and circle
    e. Allow the wings to flap until the animal clams down
6. What is the procedure used to restrain passerines or doves?
    a. Hold one leg in each hand
    b. Circle both legs completely with one hand
    c. Place one hand around the neck
    d. Place the bird in one hand so that the head extends between your index and middle fingers
    e. Allow the wings to flap until the animal calms down
7. When restraining for a foot procedure, what must the handler do?

a. Hold the animal securely
b. Watch others in the area
c. Watch the medical procedure closely
d. Communicate with others involved in the procedure
e. Tuck one foot up in a towel and hold the other securely with both hands

8. When restraining for a wing procedure, what must the handler do?
    a. Hold the animal securely
    b. Watch others in the area
    c. Watch the medical procedure closely
    d. Communicate with others involved in the procedure
    e. Face the wing being treated toward the caregiver
9. When restraining for a body procedure, what must the handler do?
    a. Hold the animal securely
    b. Watch others in the area
    c. Watch the medical procedure closely
    d. Communicate with others involved in the procedure
    e. Pick one position and hold it constantly in that manner
10. What does the phrase "You let me go, I'll let you go" refer to and what is the technique for this procedure?

11. State two specific concerns or facts regarding restraint techniques on the following species:
    a. Kestrels
    b. Eagles
    c. Sharp-shinned hawks
    d. Great horned owls
    e. Harris' hawks
    f. Ferruginous hawks
    g. Dickie birds
    h. Geese
    i. Mammals
12. As you are holding an animal for a procedure, what questions are you asking yourself as you monitor the situation? List ten.
    a.
    b.
    c.
    d.
    e.
    f.
    g.
    h.
    i.
    j.

13. You have completed Section Two: Handling and Restraint. What was the most interesting part of this section for you?