



F L A P

# **Volunteer Training Manual**

**Bird Rescue ~ First Aid ~ Transport ~ Release**

*Working to safeguard migratory birds in the urban environment through  
Education, Research, Rescue and Rehabilitation*

February 2012

This manual is an introduction to bird rescue for birds injured by colliding with structures. It gives an overview of the problem and procedures for bird rescue. It is not meant to replace direct training with an experienced volunteer.

## Fatal Light Awareness Program (FLAP)

The Fatal Light Awareness Program (FLAP) is a charitable organization founded in 1993 “*To Preserve the Lives of Migratory Birds in Urban Areas.*” Specifically, FLAP is working to find ways to modify and eliminate two major hazards to migratory birds in the urban environment: light that attracts nocturnal migratory birds away from their migration and windows that the birds collide with. FLAP has worked with building management companies, the media, and the City of Toronto to increase public awareness of the problem, encourage people to turn off the lights at night, and research solutions to the glass hazard. In 2006, FLAP joined with the City of Toronto and other organizations to promote *LIGHTS OUT Toronto!*, a public awareness campaign aimed at reducing bird deaths. Initiatives include the award winning *Bird-Friendly Development Guidelines* ([www.toronto.ca/lightout](http://www.toronto.ca/lightout)). These guidelines became part of the *Toronto Green Standard* in 2010 which requires bird-friendly elements to be incorporated into almost all new development in Toronto.

FLAP bird rescue volunteers monitor hazardous buildings, rescue and treat injured birds, and document both living and dead birds. FLAP volunteers have collected over 54,000 birds from 164 species in the Greater Toronto Area since 1993.

## Bird Migration and Cities

Knowing a little about avian migration will help you understand why buildings, light and glass are so dangerous to birds.



Most of our smaller native bird species, particularly songbirds, migrate at night. Although they would not usually fly in the dark, due to neurochemical and hormonal triggers, many birds get a strong urge to fly and migrate at night. Flying at night may help them avoid predators and take advantage of the daylight hours to search for food. Birds use the moon and stars and natural landmarks such as lakes and mountains to navigate.

Like most major cities, Toronto is situated near a large landmark (Lake Ontario) on a major migration flyway. This means a great number of birds pass through during each migration season.

These nocturnal migrants are attracted to the lights left on in human-built structures, derailing their migration journey and causing them to flutter about the light until they drop from exhaustion, or sustain injuries from striking the glass on the structures. Glass on any structure, lit or not, is a hazard to birds which do not recognize it as a barrier. Collisions may begin around midnight.

The majority of nocturnal hits occur in migration season from mid-March through early June, and again from mid-August through mid-November. Peak times are May and late September through October.



Birds are reluctant to leave this light source (Photo: Jay Smooth of [www.hiphopmusic.com](http://www.hiphopmusic.com))

Nocturnal migrants have been known to hit illuminated structures in all kinds of weather, including heavy rain. Foggy nights and strong winds are extremely dangerous. A sudden increase in temperature in spring or a sudden drop in temperature in fall may result in a larger number of birds coming through at the same time. The one time when there are likely to be few, if any, casualties, is on a clear night with a full moon. On these nights, the birds fly at higher altitudes and are better able to avoid the towers. Cloud cover forces the birds to fly lower than they might otherwise, bringing them closer to the dangerous light. On occasion, collisions can occur shortly after dusk due to the sudden arrival of inclement weather.

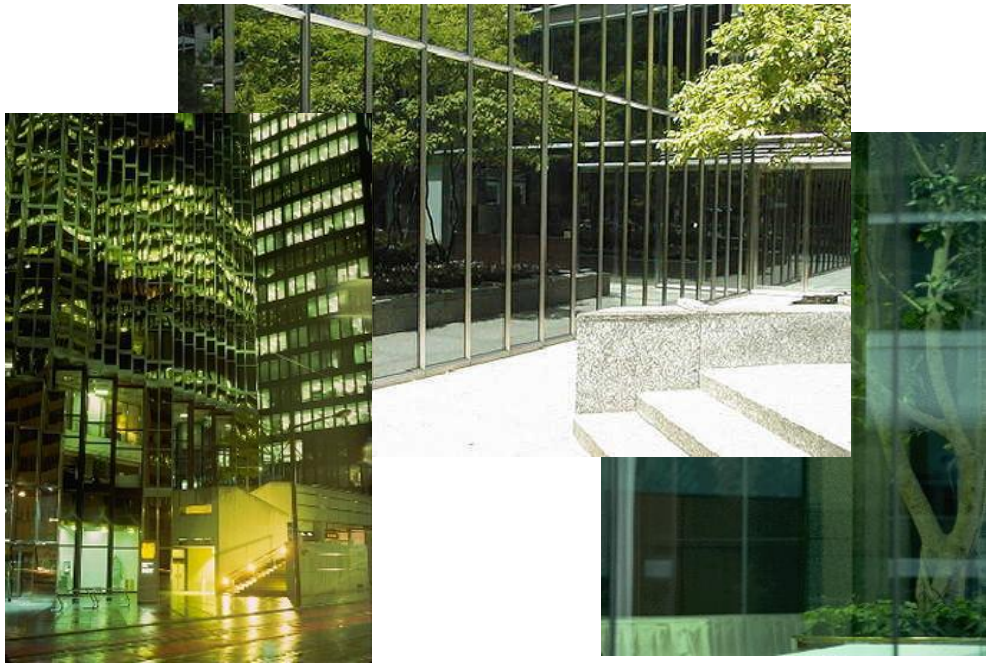
When the birds are near the ground, the glass windows present an ongoing hazard throughout the day. Although birds have better color discrimination and depth perception than humans, they do not seem able to perceive the glass as a barrier. This is especially true with highly reflective glass. Birds attempt to fly through the windows, causing injuries and death.



Window film treatment to prevent bird window collisions at the Earth Rangers facility in Woodbridge, Ontario.

## Building Assessment

Some building features that seem to create more of a problem for birds. Buildings with highly reflective glass, dark glass, and clear glass with plants visible on the inside seem to be more of a problem. Vegetation near windows encourages birds to stay in the area. An area surrounded by buildings, such as a courtyard, increases chances that birds will also have a hard time finding their way out. Check buildings with these features frequently.



The *Bird-Friendly Development Guidelines* and other building assessment resources are available at: [www.flap.org](http://www.flap.org) or [www.toronto.ca/lightsoout](http://www.toronto.ca/lightsoout)

## Rescue Patrol

Every day during migration, FLAP volunteers patrol for birds in three major areas in Toronto: the financial district in downtown Toronto, Consilium Place in Scarborough, and the Yonge and York Mills area. Other hotspots in the city include Yonge and Bloor, College and University, and Yonge and Eglington. FLAP volunteers also patrol outside Toronto in Markham and Mississauga. Financial District patrols start at least an hour before dawn and last at least an hour after dawn. Consilium Place and Yonge and York Mills patrol times stretch later in the day. Volunteers use nylon nets to help rescue trapped and injured birds. After quickly determining the species and examining each bird for injuries, a trained volunteer will place the bird inside a paper bag, making sure it stays upright. Paper bags provide an a safe space to recuperate and facilitate transportation. Within a few hours, if the bird is deemed ready to go, it will be released in a natural area well away from any hazardous buildings.

### Getting Started

#### **Rescue supplies**

The following is a list of supplies that you will need for bird patrol and rescue:

- ◆ Brown non-waxed paper lunch bags (in various sizes)
- ◆ Tissue (unscented and lotion-free)
- ◆ Paper clips and / or binder clips (small size only!)

- ◆ Pen (non-toxic felt may work best)
- ◆ Notepad to record collisions
- ◆ Boxes of various sizes (if possible)
- ◆ Net (nylon type)
- ◆ Method of carrying birds (large bag or roomy backpack)
- ◆ Map of the area
- ◆ FLAP's phone number and phone numbers for rehabbers
- ◆ Hand sanitizer or moist towel
- ◆ Exam gloves
- ◆ Arnica homeopathic remedy (you will receive the current protocol with the on-the-street training)
- ◆ Margarine container with tissue inside and holes in the lid (for bats)

The uses of these items are discussed in the sections that discuss bird handling, transport, infection control, and documentation.

### **Dress**

Dress appropriately for the season. It can be extremely cold and windy in the downtown core in early spring and mid to late fall, so wear warm, layered clothing. Comfortable shoes are a must as there is a lot of walking on concrete. Quiet shoes are preferred, since they startle the birds less. As volunteers often have to kneel down to pick up birds, shorts may be uncomfortable.

Please avoid red and orange clothing as these colours may be interpreted as aggressive by the birds. Wear clothing without animals on it - birds may see these as predators. A cap with a brim or bill may also be threatening to the birds.

### **Personal Safety**

The office towers in downtown Toronto have security people who keep a watch on our movements. If you feel especially unsafe in a particular place (e.g. TD Linkway) ask the security staff to keep an eye on you as you explore the area. Volunteers are encouraged to work in pairs when patrolling for bird casualties at night.

Be aware at all times of your surroundings, the whereabouts of security guards and the movements of suspicious characters. FLAP appreciates the effort made by volunteers to rescue birds, but don't enter a situation or place where you feel uncomfortable or unsafe. Women volunteers may wish to consider taking a self-protection course such as WEN-DO.

### **Timing**

Sites are monitored during migration times, usually mid-March until early June and again mid-August to early November. Depending on the location, volunteers patrol from at least one hour before dawn until one hour after dawn, and then may also continue during the day. Some sites have more window strikes near dawn, whereas some have more in the daytime hours. Careful observation and assessment of the site will show which times most need to be covered.

### **FLAP Toronto Routes**

FLAP has made maps of the different patrol zones. Volunteers should check all buildings in the zone if they can. There is no set route: each volunteer may patrol the buildings in a different manner. When you patrol with an experienced volunteer, they will show you the tricks of the routes. If there are teams of volunteers in one zone, they can patrol together or divide up to provide better coverage of the area. Some zones have buildings that are more likely to have tower hits. You will get to know those buildings and may wish to check them more frequently than other buildings.

### **Acknowledgment of Risk**

This document must be signed in the presence of a witness, dated and returned to FLAP before the commencement of bird rescue activities.





FLAP volunteers patrol Consilium Place in Scarborough every day during the migration seasons for fallen birds.  
(Photo: FLAP)

## Searching for Birds



An injured Ovenbird. (Photo: Sara Scharf)

When searching a building for birds, you may wish to use some techniques that volunteers have discovered to be helpful. Walking parallel to a building and fairly close to the glass gives you a clear view the full side of the building. Also, if you startle the bird with your approach, the bird is more likely to fly alongside the building or away from it. If you approach the bird when it is between you and the building, the bird may fly directly into the building, further injuring itself.

You will find most birds on the ground, fairly close to the building, but they can be almost anywhere. A bird hitting at a higher level can fall farther from the building, especially if there is overhanging glass on higher floors. Check in nooks and crannies, as injured birds may look for somewhere to hide. Occasionally, birds are found on ledges above ground level, in planters and gardens and even on statues or in the middle of the road. While walking alongside the building, glance around you for other places birds might be. Don't forget to watch where you're stepping as birds or bats may have fallen where you are walking.

If you find a large number of birds, call the FLAP phone line to alert us that you need help.

## **Catching a Bird**

Remember these hints for catching a bird:

- ◆ Approach from behind (except woodcocks)
- ◆ Move deliberately and quickly, but carefully
- ◆ Do not chase birds- they might be scared into hitting glass and become exhausted.
- ◆ Walk close to buildings

Use bander's grip to pick up or gently place net over bird first

In many cases, a stunned bird on the ground can be captured using your hands. Try to approach the bird quietly from behind (as long as you are not scaring it into the glass) as most birds have a blind spot right at the back of their heads. (The exception is a woodcock, which has the blind spot directly in front of them.) If you can, crouch as you approach to lessen the chance of scaring the bird. Move your hand toward the bird from behind, and only slightly above the bird. Cover the bird's back and grasp it in the bander's grip.



FLAP's Executive Director and co-founder Michael  
Mesure recording a dead bird at Consilium Place.

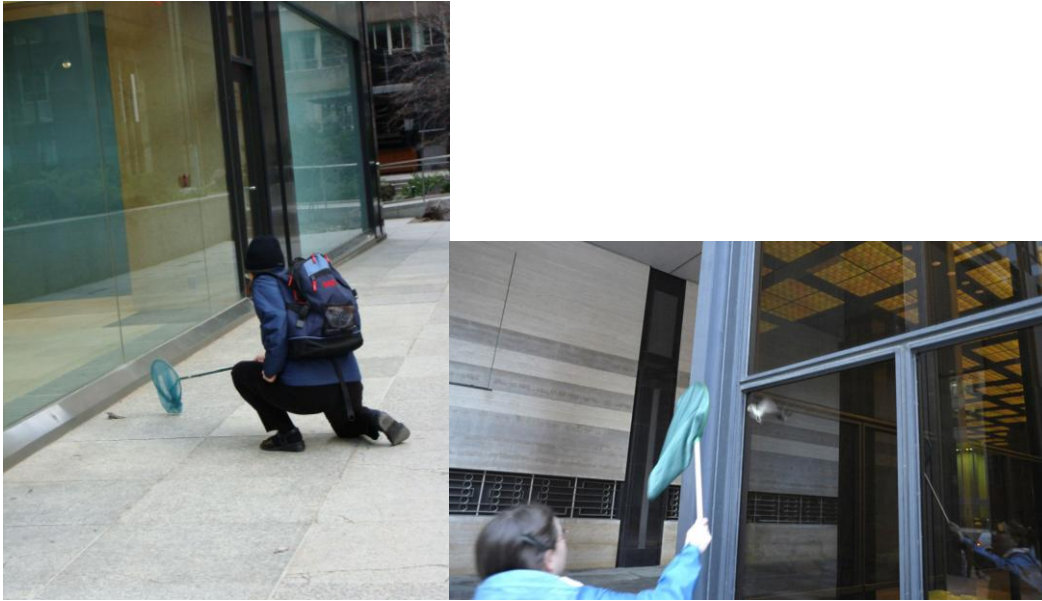
A net allows you to secure the bird from a distance without having to get as close to the bird.

Maintaining distance decreases the chance that you will scare the bird into flight. Avoid nets of red, orange or yellow, as these colours are aggressive to many birds. If using a net, approach the bird the same way as in a hand capture. Be careful not to hit the bird with the net's rim. Once the bird is under the net, you may put your hand under the net and grasp the bird in the banders' grip. Alternately, you can grasp the bird in the bander's grip with your hand on the outside of the net.

If birds are still on the move, they are harder to catch. If they are flying around, the best option is to stand back while they settle. If you chase a flying bird you greatly increase the chance that the bird will injure itself flying into a window. If the bird is on the ground, but still active, you can try to catch it in several ways.

First, if possible, slowly work the bird into a corner so that you may lessen the possibility of the bird receiving further injury. Once in a corner, you can use the net as in a ground capture. If the bird is fluttering against the glass, you can cover the bird with the net held sideways against the glass. You may then grasp the bird in the bander's grip under or over the net.

Occasionally birds of prey collide with buildings. Extreme caution and specialized equipment must be used in handling these birds. If you do not have experience and proper equipment, do not attempt to handle the bird but call for help from a volunteer experienced in handling birds of prey. Additionally, bats will sometimes collide with buildings. Handling of bats will be discussed in another section.



FLAP volunteers rescuing birds in the Financial District. (Photos: Sara Scharf and J.P. Moczulski)

### **Holding a Bird**

Remember these points for handling birds:

- ◆ Use the bander's grip
- ◆ Allow the feet to perch on your hand.
- ◆ Allow the chest and belly to move naturally.
- ◆ Keep wings tucked



A rescued male Common Yellowthroat (Photo: Sara Scharf)



## **Banders' Grip**

Note: This description does not take the place of individual training in bird handling. Volunteers should attend a training session and accompany an experienced volunteer to learn these techniques.



The main method used for holding a bird is called the bander's grip, a hold developed by bird banders in North America. The bird's neck is held between the index and the middle finger with the beak facing out, the neck snug in against the knuckles, and the bird's back against the palm. Birds have 13 cervical vertebrae (neck bones) where humans have only 7. This means that birds' necks can move more than ours, and that they are comfortable with their heads held this way. The tips of the index and middle finger are kept together with the fingers bent. When holding a bird using the correct bander's grip, you are not cutting off the circulation.

While holding the bird in the bander's grip, birds can be made more comfortable if you can give them something to grip on. Allowing a bird to use your little finger as a perch while you are holding it will help make the bird feel more comfortable. Both wings should be tucked in against your palm and in a natural position, so they are unable to flap them. Keep in mind that bird bones are light and some are hollow, so they are somewhat delicate. Be firm but never rough when handling.

You do not want to hold the bird around the body. In mammals, the sternum (breastbone) is fixed and remains stable when they breathe or move. Because birds need more flexibility to be able to fly, the avian sternum is flexible. This means that the sternum also moves when the bird breathes. If the sternum is constricted, the bird cannot breathe. When holding a bird, you **MUST NOT** impede the breathing by holding the bird around the body. Holding the bird in the correct bander's grip keeps the hold only in the proper place, around the neck.

## **Carrying and Transporting Birds**

Remember these points for transporting birds:

- ◆ In brown non-waxed paper bags (making sure bags are expanded) with flat bottoms
- ◆ Tissue (unscented and lotion-free) in bottom of bag
- ◆ Securely close top of bag with paper clip or small binder clip
- ◆ Use bigger bags for larger birds
- ◆ Woodpecker species should be placed in a box!
- ◆ Place the bags in a secure upright position as the birds may start to bounce inside them as they recover their strength, and the bags may fall from where they are placed.

Many birds retrieved from the downtown core at night have suffered a mild concussion and will recover if kept in a warm, dark, and quiet place for one to two hours. Those with injuries may need long-term care. FLAP works with experienced rehabilitators to assess and treat the injured birds and sometimes there is a rehabilitator on site. Injured the birds are transported to the Toronto Wildlife Centre or another rehabilitation facility.

Unwaxed brown paper lunch bags with flat bottoms are the best containers to transport birds. They provide a dark, quiet environment and form a pocket of air around the bird. They do not need air holes as the bags

themselves are porous. Paper bags can be placed close together or even stacked on top of one another if necessary, but please make sure that the heavier birds are placed on the bottom if you do have to stack the bags for a short period of time.

When patrolling, have a supply of paper bags with a piece of plain (no lotion or scent) tissue in each bag. One half of a tissue is enough. Placing a tissue in each paper bag will give perching birds something to hold onto, making them feel more secure. When you have a bird in the bander hold, you can put your whole hand with the bird into a bag. Close the bag around your wrist by using your other hand to secure the bag. Once the bag is closed around your wrist, release the bird gently on the bottom of the bag. Slowly withdraw your hand, keeping the bag as tight around your hand as you can, to decrease the chances of the bird flying out of the bag.

If you have grasped a bird still in the net, you can put it directly into the bag from the net. Make sure that the bird's toenails are not caught in the net, and that as much netting as possible is away from the bird. You can then use the same procedure for a bird in the hand. If the toenails are caught in the net, very gently unhook them. Avoid pulling directly down on the bird's foot which may injure its joints.

Make sure the bag is closed securely by rolling the top down at least 3 times and secure with a paper clip. You can use a non-toxic felt pen to mark information directly on the bag. To avoid cross-contamination use paper bags once only

Birds that are in deep shock can appear to be dead. Even if a bird is lying on its side do not assume that it is dead. Recently fallen birds may still be alive and may begin to flutter or even try to escape from you when you go to pick them up. If you pick up a bird that is still warm, place it in a paper bag to be cautious. Birds that are truly dead may go in a plastic baggie.

Larger birds can be placed in large double-lined paper grocery bags or a cardboard box lined with a cloth or paper towel. Woodpeckers and birds of prey should be placed in an enclosed box. They can peck their way through a paper bag in no time. Woodcocks should be put in a large paper grocery bag and then placed in a box. (Woodcocks can fly straight up, even in a small place, with the potential to cause themselves further injury. Double bagging will alleviate this problem. If double-bagging, make sure there is enough air flow.)

You also need some way to carry many bags around with you. Some volunteers find that a large backpack works for them. Others use large paper or reusable shopping bags. The important thing about storage of bags with birds is that the bags should remain mostly upright and expanded, and don't have too much harsh motion. Do not place woodpeckers near other birds. A plastic bag or badly soiled paper bag can be used to hold dead birds.

### **Decreasing Stress to the Birds**

The birds that FLAP volunteers pick up are already experiencing stress from a strange situation, injury, dehydration, and handling by a potential predator (the rescuer). This stress can decrease the birds' chance of survival, so volunteers want to minimize extra stress. Try to reduce stress for the birds by doing the following:

- ◆ Talk quietly or not at all
- ◆ Avoid direct eye contact with the bird
- ◆ Avoid clothing with animal pictures
- ◆ Avoid red or orange clothing
- ◆ Keep handling to a minimum
- ◆ Move the bird as little as possible
- ◆ Hold in a quiet, dark place
- ◆ Release or get to rehab as quickly as possible.

Signs of an overly-stressed bird include:

- ◆ Open-mouthed breathing
- ◆ Increased breathing
- ◆ Shutting of one or both eyes

- ◆ Making distress calls
- ◆ Head drooping
- ◆ Fluffed appearance.

### **Documentation**



Record the following:

- ◆ Species (if known)
- ◆ Date and time picked up (in hour increments)
- ◆ Building address
- ◆ Side of building
- ◆ Any injuries noted while rescuing
- ◆ Any homeopathic treatments given
- ◆ Tag number for each dead bird
- ◆ Name of rescuer

As a FLAP rescue volunteer, your first priority is to rescue as many birds as possible. Another priority is to accurately document your findings. The more accurate data FLAP can provide, the better the chances of convincing building owners, building managers, architects, and city planners that solutions need to be found to prevent this problem continuing.

If a bird is dead, place a unique numbered FLAP tag on it. This number will be entered in the database with the bird's information. The bird can then be deposited into a freezer. Each spring a volunteer workshop and bird layout is held where all the deceased birds from the past year are removed from the freezer, checked for proper identification, and then handed over to the Royal Ontario Museum (who will use the birds for research and education purposes).

FLAP rescuers submit their data via the internet where it is stored in a main database. To access FLAP's database, you will be given a login and password from the FLAP office.



A portion of the birds FLAP volunteers collected in 2009 (Photo: Kenneth Herdy)

## Transporting Birds – Driving

The birds will need to be transported from where they are found to rehab or release. Sometimes the rescuer is also the transporter. FLAP also uses drivers to pick up rescued birds and deliver them to rehab. Drivers should be familiar with basic bird holding, handling and capture and first aid (see other sections). Having an extra supply of bags, tissue, clips, and a net will prevent possible mishaps.

Keep your car quiet and smoke-free when transporting birds. Drive smoothly. Birds can hop about and make their bags bounce. Make sure that the bags are blocked from falling off the seat, or going under the seat, or falling out when the door opens.

If a bird escapes in the car, pull over to the side and use bird handling skills to re-capture the bird and place the bird in a new paper bag. Remember to keep the original bag with the bird if you have written any data on it.



## Bird Identification



A Canada Warbler, now a Threatened species.

Correctly documenting all species of birds allows FLAP to keep more accurate statistics. If you can identify the bird while capturing and placing it in the bag, it will minimize any further handling needed to identify the bird later. *However, bird identity is not as important as keeping the stress for the birds to a minimum.* If you cannot identify the bird after a quick look, put the bird in a bag for transport - it can be identified at a later time. Even if the bird is never identified, the important thing is that it was rescued and has another chance at life.

A good bird guide such as Peterson's *Field Guide to Eastern Birds* or *National Geographic's Field Guide to the Birds of North America* is vital in identifying birds. You should familiarize yourself with a bird guide before you begin patrolling. Tips to assist you in identifying the bird are shape of beak, size of bird and colour. You can quickly learn to group a bird into a certain species once you are more familiar with the common species you are likely to pick up.

## Evaluation and First Aid



FLAP's Program Coordinator Paloma Plant assessing a bird.

A healthy bird should look the same on both sides-wings held the same way, face looks the same on both sides, sits up strait without leaning to one side or tilting its head. It should turn to visual stimulation such as your finger about an inch from the side of the head. A bird should try to escape from you by flying, running, or moving. If you are holding it, it may threaten you by pecking or raising the feathers on the top of its head. Toes on both feet should be able to grasp or pull away from stimulation. Breathing should be even and regular while the beak remains closed.

While some of the birds that volunteers pick up just appear stunned or have no obvious injuries, there are times when the trauma is apparent. The following are evidence of trauma that need assessment by a rehabilitator:

- ◆ Head tilt
- ◆ Inability to stand
- ◆ No response to visual or auditory stimuli

- ◆ No escape behaviours (just sitting on a hand)
- ◆ Bulging “frog” eyes
- ◆ Droopy eyes
- ◆ Facial asymmetry (Sides of the face looking different from each other)
- ◆ Heavy/noisy/clicking/open -beak breathing
- ◆ Droopy wing (could be a fracture)
- ◆ Broken beak
- ◆ Caught in spider webbing
- ◆ Blood anywhere

Do not assume that a bird is dead because it’s lying on its back or side, with closed eyes. This could be deep shock, so place it in a paper bag. If a bird is not able to stand or sit upright, you may twist a tissue into a “donut” by rolling a tissue length-wise and fasten the ends together so it looks like a donut. Place the bird in the middle to help keep the bird upright. This is just the size for warblers and sparrows.

Some volunteers give the birds Rescue Remedy or Arnica on site. If you choose to do this, please check that the remedy you use is approved by FLAP, and use the approved method of administration.

The best first aid is to keep the bird safe, decrease stress and get them to a knowledgeable rehabilitator as soon as possible.

Here is a quick avian assessment guide that is discussed in training:

#### Level of Alertness/Activity

- ❑ *Bad signs:*
  - Unresponsive to noise, light, handling
  - No escape behaviours
  - Hyperstartle
  - Odd vocalizations
  - Bleeding

#### Postural Responses

- ❑ Stepping response - If the bird is held upright so that the feet brush the ground, it should step with its feet
- ❑ Sitting posture -When not being held, bird should sit or stand
- ❑ Lowering wing flap response
- ❑ *Bad signs:* Persistence of following postures has high suspicion for neurological damage
  - Head tilt or twist or gazing upward (“stargazing”)
  - Head tremors
  - Neck fixed upward
  - Walking in a circle
  - Drooping wing, twisted leg, loss of proprioception (knowing where your limbs are)
  - Wide standing stance
  - Spastic- jerking movements
  - slow initiation of response may mean sensory problems
  - no follow through with initiated movements may mean motor problems
  - one-sided response may mean damaged limb or neurological damage

#### Cranial Nerves

- ❑ Beak strength -There should be resistance pushing the beak from side to side
- ❑ Hearing-Bird should turn toward loud noise or startle to noise (clapping hands)
- ❑ Swallow reflex - Bird should swallow when beak is lifted and throat stroked gently
- ❑ Facial symmetry -especially around eyes
- ❑ Eye sight -Bird should react to light or object moving toward its eye with blinking or turning  
(Unlike mammals, pupil response varies in birds as they have some voluntary control, so this is an unreliable indicator of trauma)

- ❑ *Bad signs*
  - Nystagmus (eyes rhythmically flickering)
  - Eye lids drooping (especially if asymmetrical)
  - Eye bulging

#### Spinal reflexes

- ❑ Pain withdrawal – withdraws from pressure on foot or wing
- ❑ Proprioception (knowing where parts of the body are)

#### **No Food or Water**

One difference between humans and birds is that birds do not have a full glottis. The glottis is the flap of tissue that covers the trachea (breathing tube) while humans and some other animals eat. Birds do not have that protection for their trachea. They must coordinate swallowing carefully to avoid getting food in their lungs. If you put something in a bird's mouth, especially if the bird is injured, there is the risk that food or liquid could go into the lungs, causing pneumonia. Because of this, never give birds anything to eat or drink. Of note, a lot of birds never really drink, they get all the fluid that they need from the insects in their diets. Many of FLAP's songbirds are insectivores (insect-eaters).

#### **“Broken Necks”**

Volunteers often assume that the birds have died from a broken neck, or have neck injuries. Neck injuries are only rarely a cause of injury and death. Remember that birds have 13 cervical (neck) vertebrae (bones), so they can move their necks much more than humans who have only 7 cervical vertebrae. The most common causes of casualty are head trauma and internal injuries, similar to a human hitting a windshield in a car accident.

## **Release**



An Ovenbird being released in a conservation area. (Photo: J.P. Moczulski)

Birds that are assessed as ready to be released should be released as soon as possible. They should be assessed first by a knowledgeable person. If possible, take bird into a small room (without windows, with a closed-in ceiling) and release to see if it can fly up. To recapture the bird, make certain that you know its location, then turn the lights out and retrieve it as quietly and gently as possible.

Ideally birds should be released to the north of the city in the spring and to the south west of the city in the fall. Every species needs to be released in habitat appropriate to its needs. Releasing the bird near structures puts it at risk for further injury.

## **Non-avian Rescues**

### **Bats**

Volunteers may occasionally find a bat. If the bat is on the ground or low on the building, it probably needs help. As there is the possibility of a bat carrying rabies, never touch one with your bare hands. A good method of capture is to use a margarine container with a hole poked in the top to scoop up the bat. If pushed gently from behind, most bats will “walk” into the container, which can then be closed. Of note, bats will get out of paper bags fairly easily, so it is not recommended to put a bat in a bag.

If you are uncomfortable with bats, alert a senior volunteer on patrol or call the FLAP phone line to inform us where the bat is located.

### **Other Mammals**

If you see a wild mammal in distress, please call the Toronto Wildlife Centre for assistance. If the mammal is human, call 911.

## **Infection Control**

Whenever you are in contact with other living beings, there is the risk of transmission of germs. You stand a greater risk of acquiring an infection from another human than from a wild animal. You are of greater risk to the birds --which are exhausted, stressed and injured -- than they are to you. Luckily, the way to protect both is the same.

### **Handwashing**

The single most effective infection control measure is to wash your hands. Proper hand washing is to wet and lather your hands and rub them all over for at least 15 seconds, then rinse. If possible, you would wash your hands between each bird. As that is often not possible in the field, make sure to clean your hands whenever they get bodily fluids on them.

### **Intact Skin and Barriers**

The second most effective infection control measure is to ensure that the skin on your hands is intact. Intact, in this case, means well moisturized and without open cuts or nicks. If you have an open cut on your hand, cover it when doing FLAP rescue work. Wearing gloves gives you an intact “second skin”. Avoid contact with your gloved hands and your mucous membranes (eyes, nose, mouth). Practice taking off gloves without touching the dirty surfaces to your skin.

While wearing gloves protects your skin from the bird and an individual bird from your skin, it does not protect the bird you are handling from the excretions of the bird that you previously handled. It is not always possible to clean your hands between each bird. If your gloves or hands do get soiled, clean them before picking up another bird. Hand sanitizer may be used on hands or gloves between birds, but use one without additives such as aloe that may hurt the birds’ feathers.

### **Maintaining health**

Another effective infection control method is to maintain a healthy immune system. Make sure that you have plenty of rest (yes, even though FLAP is asking you to rise at 3:30 in the morning to rescue birds!), eat right and get proper exercise (by walking around building, looking for birds, of course!). If you are immuno-compromised for any reason (cancer, HIV, elderly, etc.) check with your health care professional about volunteering.

### **Soiled surfaces**

If any solid surfaces get soiled, the best way to clean them is with a 1:10 bleach solution. Good airflow also decreases the chances of transmission of illnesses.



## **Zoonoses (infections transmissible to humans from other animals)**

There are infections that can be transmitted from animals to humans. These are called zoonotic diseases.

The most likely (but not that likely) zoonoses to guard against are not from birds, but from creatures associated with birds: mosquitoes can transmit encephalitis and West Nile virus and ticks can carry Lyme disease. Mosquitoes are not very common during spring and fall migration, so that risk is low. Ticks on birds should be documented. Remember that ticks like to hide in folds of skin in warm places.

You may see small bugs on a bird. Each bird species has its own species of parasites such as lice. They will not live on humans. Hippoboscids (louse flies or pigeon flies) may also be found on some species. These are the size of small house flies and should be crushed when found.

If you develop an unexplained illness, let your health care provider know that you work with wild birds, although this is unlikely to account for any illness. FLAP volunteers have handled over 35,000 birds - both dead and alive - over 13 years. Most have been handled with bare hands. There have been no illnesses attributable to contact with birds.

Avian flu and H1N1 viruses have been associated with avian species. Avian flu is transmitted by mosquitoes -- you cannot get it from the birds. H1N1 virus is not associated with songbirds as of 2010. The open air environment is also a deterrent to H1N1. If you would like more information on Avian flu or H1N1, check out Public Health Agency of Canada website at: <http://www.phac-aspc.gc.ca/id-mi/index-eng.php>

Remember that intact skin and hand washing go a long way to preventing contamination. In order to avoid direct contact with blood and feces, you may wear gloves when handling birds.

## **Public Relations**

### **Talking with the Public**

As a volunteer for FLAP, you may be approached by members of the public, curious about your activities. By all means tell them about the issue and how important it is for buildings and homes to turn off the lights and address the reflectivity of their windows. Give them a brochure or FLAP's number if they have further questions. Explain the rescue procedure to them. They may watch you catch birds, but they should not be allowed to touch the birds. Explain that the birds are stressed, wild creatures, and handling and visual contact with humans must be kept to an absolute minimum. You may always answer a question with, "I'm not sure about that. Contact the FLAP office and they can help you." The website at [www.flap.org](http://www.flap.org) offers more information on the problem and potential solutions.

### **Talking to building staff**

As you patrol, you may meet building staff. When asked, identify that you are with FLAP. Ask cleaning staff if they have seen any birds, and what they do with them. If they are not familiar with FLAP, give them a brief outline of the problem and what FLAP is trying to do. Let them know the procedure and drop off place for any birds they find. Give them brochures and the FLAP number. The building cleaning, maintenance, and security staff have been some of FLAP's best allies. Please treat the building staff with respect and courtesy. If they ask you to leave the property, do so politely and inform FLAP staff.

### **Talking with the Media**

FLAP appreciates media coverage and wants to ensure consistent presentation of the issue, so we welcome media involvement. Working with the media does entail special information and skills. FLAP asks that all media requests and questions be directed to the main office. There is opportunity for volunteers to do public presentations and media events with other trained volunteers.

## Other Ways to Help FLAP

Bird rescue is only one of many duties volunteers can perform. There is a lot to do! You could help with our education program by informing the public through presentations and booths, prepare materials, write articles or provide illustrations or photographs for the newsletter, or serve on the board of directors or a committee. Drivers to transport birds to rehab are also needed. New volunteers are most welcome.

Financial help is always greatly appreciated. FLAP depends on contributions from supporters to continue its work.

## Contact Information

- ◆ FLAP  
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[flap@flap.org](mailto:flap@flap.org) [www.flap.org](http://www.flap.org)
- ◆ Toronto Wildlife Centre      416-631-0662      [www.torontowildlifecentre.com](http://www.torontowildlifecentre.com)

## **Appendix A**

### **Quick Avian Trauma Triage Assessment**

#### Level of Alertness/Activity

☐ *Bad signs:*

- Unresponsive to noise, light, handling
- No escape behaviours
- Hyperstartle
- Odd vocalizations
- Bleeding

#### **Postural Responses**

- ☐ Stepping response - If the bird is held upright so that the feet brush the ground, it should step with its feet
- ☐ Sitting posture - When not being held, bird should sit or stand
- ☐ Lowering wing flap response
- ☐ *Bad signs:* Persistence of following postures has high suspicion for neurological damage
  - Head tilt or twist or gazing upward (“stargazing”)
  - Head tremors
  - Neck fixed upward
  - Walking in a circle
  - Drooping wing, twisted leg, loss of proprioception (knowing where your limbs are)
  - Wide standing stance
  - Spastic- jerking movements
- slow initiation of response may mean sensory problems
- no follow through with initiated movements may mean motor problems
- one-sided response may mean damaged limb or neurological damage

#### Cranial Nerves

- ☐ Beak strength -There should be resistance pushing the beak from side to side
- ☐ Hearing-Bird should turn toward loud noise or startle to noise (clapping hands)
- ☐ Swallow reflex - Bird should swallow when beak is lifted and throat stroked gently
- ☐ Facial symmetry- especially around eyes
- ☐ Eye sight - Bird should react to light or object moving toward its eye with blinking or turning  
(Unlike mammals, pupil response varies in birds as they have some voluntary control, so this is an unreliable indicator of trauma)
- ☐ *Bad signs*
  - Nystagmus (eyes rhythmically flickering)
  - Eye lids drooping (especially if asymmetrical)
  - Eye bulging

#### **Spinal reflexes**

- ☐ Pain withdrawal – withdraws from pressure on foot or wing
- ☐ Proprioception (knowing where parts of the body area)