

# 2006 Ontario Ministry of Natural Resources Enforcement Conference

By Maya Basdeo

At the end of February 2006 the Ministry of Natural Resources held a special conference for all the Conservation Officers in the province. This is only the 2nd time in more than 100 years that all the CO's have been brought together under one roof. The conference was held in Sault Ste. Marie and included a small exhibit hall. The OHC was fortunate to be invited to participate and give a presentation on falconry. Martin Geleynse, and myself attended on behalf of the Club. Since the OHC was one of only 3 non-government organizations at this conference this was a unique opportunity to address a captive audience on falconry and related issues. During our presentation, we covered some basic information about falconry, the OHC, common myths, as well as things to keep in mind when dealing with falconers.

In addition to delivering a PowerPoint presentation on falconry, we had a static display with of course some not so static birds. Marzy the Harris' hawk (Maya's bird) and Qetesh the peregrine falcon (courtesy of the Canadian Peregrine Foundation) were the stars of the show, since many of the 275 CO's had never been so close to live raptors before.

CO's may be responsible for enforcing falconry regulations, but very few of them know anything about falconry or what this sport entails. This is due in part to the fact that not all CO's have falconers living in their districts. We defined falconry and gave some examples of common raptors used in the sport. There were many surprised expressions in the crowd when we touched on things like falconry is a less effective means of taking game compared to the use of firearms, and that falconers are motivated by a number of factors other than how much game goes in the bag. We did not miss the opportunity to mention that falconers were the driving force behind peregrine falcon recovery efforts through captive breeding and release, as well as the fact that airports and air force bases employ falconers as an environmentally friendly way to control nuisance bird populations and ensure public safety.

We outlined the main objectives of the club; promoting unity, competence and high quality falconry, raptor conservation, and securing a legal framework that will allow the sport to continue and flourish. We gave examples of how the Ontario Hawking Club has been instrumental in the development of falconry regulations, as well as the Club's contribution to policies such as the "let-it-lay" and band requirements. We also stressed our goals for the future; continuing to work towards normalizing, or demystifying falconry in this Province, and continuing our work with the MNR on falconry and related issues. We were forthright in stating our goal to gain legal access to wild birds for the use of individual recreational falconry.

Understanding that Conservation Officers are on the front lines of enforcement, we also addressed real-world scenarios. The issue of inspecting a falconer's facilities was on our agenda. We gave an overview of the typical types of facilities the CO's

might expect to find. We explained that falconers are very particular about their birds and asked (nicely of course) to have the falconer present whenever possible in order to handle his or her own bird during an inspection. Timing of inspections was discussed. We stressed that carrying out an inspection during breeding season carries with it the very real possibility that birds will be stressed, and eggs and young may be injured or killed if disrupted during this time period. We talked briefly about meeting falconers in the field and how to tell the difference between if someone is hunting or training a bird.

We concluded our formal presentation by stating that familiarity with falconry is in everyone's best interest. In order to assist the MNR and enforcement branch with falconry, we invited them to come to our field meet or to spend some time in the field with a falconer. That being said, now would be a good time to ensure your paperwork, logbook or journal is in good order!

Once our presentation was finished, Martin and I returned to the booth and the birds. We had a steady stream of CO's and MNR staff for several hours, during which time we handed out newsletters and extra posters from previous field meets. We clarified the misconception that birds have to be 'starving' in order to hunt or to be trained. The degree of care and concern most falconers have for their birds seemed to be a bit of a surprise to some. The funniest moment for me was during a conversation with a CO. He had asked me how I get the rabbit away from my bird once he's caught it. I told him my bird eats what he catches and this man was completely flabbergasted! He could not believe that I didn't fill my bag with my bird's game. I explained that maybe once my bird becomes proficient at catching rabbits that I'd take some, but not until then.

Another area where there was a lot of uncertainty was the subject of leg bands. We clarified the differences between seamless bands and hess bands, and typically at what age a bird would have a band put on. There were questions on the type of characters embossed on the leg bands, as well as who is responsible for banding the birds bred in captivity. Most CO's had never seen a seamless band and were under the general impression that they were easily tampered with. The chance to see these bands up close on the birds, however, was a powerful demonstration of how untrue this is. Many inquiries were made regarding the cost of various species of birds. The thing that probably had the biggest impact was the disclosure that in most other states and provinces in North America, it is legal to get a permit to take a wild bird for use in falconry. Martin had occasion to show some pictures of wild-taken birds, and the information was met with shock and disbelief.

Clearly there is still a lot of misunderstanding and ignorance surrounding falconry. No doubt the conference organizers within the MNR recognized this and I think that is why they invited us. The conference was an exceptional opportunity to promote falconry to an important group of people. On behalf of the Club I would like to thank Gary Martin, Provincial Enforcement Advisor and Christine Martin, Communication and Marketing Specialist for giving us this opportunity. We have already talked to Gary about follow up efforts at the district level.

We were able to attend in part because of proceeds generated by the field meet, however major support for this trip also came from Scott and Sam Craig. Scott and Sam are Club members who live in Echo Bay (you've probably read Scott's articles in the Imprint). They generously accommodated two people and two birds at their beautiful

home for three nights, and saved us huge hotel costs. On behalf of the Club I'd like to thank Scott and Sam for their hospitality and making our attendance at this conference a reality!

# The Little engine that could

By Gary Selinger

I remember reading this story to my two children before they went to bed each night. By the end of the story we were chanting in unison: I THINK I CAN... I THINK I CAN... Little did I know that 20 years later I would be saying the same thing to my goshawk as she closed in on a monster - a European hare. Several falconers have done this in the past - some with great success and some with the disastrous result of an injured raptor. My first experience actually seeing a raptor flown at a jackrabbit was that of Steve Shute's goshawk, Daisy. It was great footage!!! From that point on my quest began, and here is my tale.

I was raised just outside of Hamilton, in the country, where we had lots of pheasants and cottontails right in our back yard. To see jackrabbits, all we had to do was go another mile or so to the south where the farmers worked the corn fields. I think my buddy and I were about twelve; we would grab our little fiberglass bows and off we would go on our safaris. The odd time, we would get a cottontail or pheasant, but most times we came home empty-handed.

On one such trip we saw these huge cottontail tracks in the snow, and followed them for a long way along fence lines and plowed fields. Suddenly, out from under our feet came the largest cottontail either of us had ever seen! We stood there in awe as this 10-pound hare (which actually looked like 25-pound dog!) loped away from us. It ran some 150 yards into the field and then just sat there looking 4 feet tall. My friend and I looked at each other, and neither of us said a word for a few minutes. Now you have to realize that at the ripe old age of twelve, we were woods-wise bushmen beyond our years and had seen it all. We had faced a raccoon in a tree staring out a hole at no less than 3 feet, with a only slingshot for protection. We looked at the tracks and knew we had to get home and talk to my dad and cousin, who were our hunting mentors at the time.

Sure enough, we found out what they were called and even got to hear about the white-tailed jacks in southern Saskatchewan, how they turned white in the winter, and how my father, as a youngster, had shot them for food. Well, we did what all 12-year olds would do with this new information: we sat down on our computers and clicked on Google to do a search for "European hare". Oops, that's right, we didn't have computers back then, so we had to rough it - we got all our knowledge from the "school of hard knocks": we had to follow these hares all over the countryside. Every time we would see a track, off we would go. Once we were old enough, we started carrying a 22 rifle, and were actually able to shoot a few. What I remember most is hanging them from my belt and having the head drag on the ground as we searched for another.

I never again saw or really thought about jackrabbits till the Ontario Falconry meet in

Woodstock a few years ago, when Dave Doughty related that he'd seen jacks out in the field while hunting Hungarian partridge with fellow-falconer Martin Geleynse. And so the quest began, to take a European hare with my goshawk.

The first morning of the meet saw my brother, Gord, and I driving all these country roads, looking down tobacco fields for that elusive black lump, which Dave assured me was very easy to see. I was really bummed out, as we never saw any, and all I could think about were the cottontails I could have been chasing. So Saturday night, after the banquet, I was able to talk Dave into going with me in the morning to see if he could spot any. We ended up with about 8 people, and although we saw lots of tracks in the snow, the only fun we had was Ulrich stopping the caravan, looking out into an open field with a small shrubby hill in the middle, shouting "We should take that hill on speculation!" I had to laugh at the way he said it, and still do each time I think about it. Well the gist of the story was we all got some exercise, but didn't see anything.

Flash ahead to the 2005 London meet. I had been talking to a few guys who live around there, and they had said there were some jacks in the area but that they were big, and the chance of taking one was a long shot. So once again I talked to the Guru of Jacks (hahaha!) - Dave - and he told me he would be able to put me in touch with a guy who hunts jacks with dogs in the area, and that we might be able to get a flight.

It was all set up: Dave would call me on a cell phone I didn't own, and around 10 or so we would hook up for some jack hunting. I always keep my gos a bit low at the meets, as she seems to have to fly about 20 grams lighter than up north to get her to respond and hunt like I know she can. So Saturday I had her weight right-on for 9 AM, and waited for the call as I hunted with Dion and Goran. The call never came, so at noon I made contact with Dave, who was still trying to find Glen, the jackrabbit guy. Finally, after lunch, Dave gave us directions to find him in a field an hour from London. At that time it was just Gord and myself; then Martin said our guest speaker Dale would also like to come along for the flight. In the end, we had about 5 vehicles following, and I was worrying about how low my gos was and how she would perform. Little did I know how the rest of the day would unfold!

To say Dave was on my most-wanted list would be an understatement, as I envisioned blowing another day at jacks with nothing to show for it. My brother told me later how Dale had hoped that all this driving wouldn't be for nothing, and that the gos would perform, or at least fly a bit at the jack if one was found. All Gord could tell him was she would fly for sure, as she never passes on a slip, but what would happen after that was anyone's guess.

We finally met Dave around 3PM. As we stopped and got the gos out, Dave and I exchanged some meaningful glances (not sure what you were saying, Dave, but I know what I was saying to you! #@\*!), and continued on. The instructions were to have everyone line up and walk out into the alfalfa field looking for holes in the snow. Glen had stated the jacks would be hunkered down and completely covered with snow because of the blowing wind. So off we went, with little idea of what to expect. I guess in my mind it would be like cottontails or snowshoe hares: one would suddenly appear, the gos would put the moves on it and, with some help from the closest people around, the hare would be subdued. We walked maybe three quarters of the field, and the line was kind of getting in disarray, when all of a sudden Martin's son, who was right beside me, looked down

and saw a small area - maybe a foot in diameter - with no snow. We knew immediately there was one right there. So we yelled out that we had found one, and everyone came over for a closer look at the slip. All the while this hare was sitting tighter than a ... The gos was acting up a bit but overall everything seemed in control.

Finally, with everyone watching and Dale's camera rolling, we busted the jack out of the hole. It came out fast, but the gos had seen this before and was off the fist in a flash. Twenty yards later the gos had her first hare.

She first hit it back-end, transferred over to the jack's head, and had it completely under control while we all watched. Reliving the story now, the jack seemed way above average in size, closing in on a good 15 pounds! Okay, okay, so my mind wasn't really that clear... the hare was a solid five-pounder - not that big, but the gos did what was asked of her and we transferred her off after a little persuasion. She was pretty damn hungry and didn't really want to let her prize go.

So that's all there is to this jack hunting. Ya, this hare was a little small - but I figured even with a larger one, as with geese, as long as the jack wasn't too far out in the field, I would have the situation under control. The group walked some more, and people's fitness levels started to show as our 'line' deteriorated into what looked like a bunch of bedraggled drunks staggering all over the field. We saw a few more tracks but no more hares. I thanked our guest profusely for offering us a chance to hunt with him. We said our goodbyes and went to try for some ducks on the way back to the banquet.

Dave, the jackrabbit guru, was in the lead, and we had just pulled out onto the main highway when he pulled over and asked if I wanted to fly another jack, as there was one sitting right there just 75 yards off the highway. NOW the lights came on and I finally got to see what I was looking for when hunting for jackrabbits. I looked out into the bare snow-covered field, and saw a small 8-inch black spot. Dave assured me it was a hare, and that he could see its head very clearly in the binoculars he was looking through. My brother and I got in the truck, parked just a short distance from the hare, and got the gos out. The anticipation and adrenaline flowing through my body at that point cannot be described in words. The snow was perfect, soft and quiet. Gord and I had talked about how once the gos had made contact, we would run over and help out - as I have done with geese in the past. The gos was right in tune, and knew what was going to happen. I swear, she can tell by my heart beat or some psychic power when a flush is imminent! We got to within 20 yards or so, and all of a sudden the hare and I made eye contact. I looked into its brown eyes and we exchanged some foreign unspoken language. I was telling it "Thank you for the flight, and it was an honour to hunt you," while I am sure, replaying the foreign words in my mind, the hare was laughing at me carrying that little canary on my fist! Truthfully, something passed between us, because the moment we made eye contact he pulled his head down even farther into the hole and got ready for his escape. What happened next is still all a blur, and I will be forever grateful to Dale for having caught it all on his camcorder.

When that hare came out of its burrow, it just kept growing and growing. This had to be the time when my gos was thinking she was "the little engine that could!" The size of it was amazing - those long back legs and long ears... Hell, it took me back to my youth and seeing the first one of my life. I just couldn't believe its size! The gos, true to form, was off in a flash and never once flinched at the size of the hare, but there was that

ever-so-brief Kodak moment where the gos looked back at me just before she struck her prey, and I'm sure she said with her eyes, "YOU BETTER BE THERE TO HELP, LIKE YOU SAID YOU WOULD!" I remember the gos making contact and getting thrown off, and then making contact again. By this time, Gord and I were trying to do a little tag team wrestling with the gos and hare between us. I made a dive for it and missed completely; next, was my brother's turn. Remember, the gos was still holding on, and gos and hare were rolling and kicking into the air all at the same time. My brother, after his initial dive missed, was lying on his back and made a grab for it. At the same moment, the hare, with my bird still attached, ran right over Gord's stomach. The jack, as seen in the movie, actually kicked/pushed-off Gord's chest with his back feet to try and get away. My brother had a hold for a second, but then lost his grip. The two were off again, and finally the hare threw the gos off and was fleeing for freedom. The gos was after him again, but after a short 100-yard slip, she gave up. We got back to the road, and could barely talk and make sense of what had happened when questioned by Dale and Dave. To tell the truth, it all happened so fast, and it was only through slow motion with the camcorder that we were able to visualize what had actually taken place.

We were at the roadside, talking like only falconers can about a slip, when Dave all of a sudden, out of the blue, says "Do you want to try for another? There are two more on the other side of the road!" What?! Sure enough, looking across the ditch we were able to make out another black spot where one was hiding, and another furrow under the snow where one was attempting to move farther away from all the commotion. I looked at the gos and she seemed no worse for wear, and gave my brother a pair of Velcro mitts to wear this time. Said to myself, 'if not now, when again?' So off we went. We got within 75 yards of the closest jack, when the farthest one broke cover. It was just too far out. I knew the gos could take it, but at that distance, we would be of no help. The gos was bating like crazy, but I held on, running as fast as I could toward the still-hidden other hare. It broke out when we were still 50 yards away, but I let the gos go and the race was on. These hares can really move in open country, but the gos quickened her wing beats, stayed close to the ground, and made up lost ground like only a gos can do. I am not sure where she got her energy from, as she had been through a lot already, but like I said before, this gos never passes on a slip. They made contact about 100 yards out, and as the gos hit, they both rolled. Snow flew everywhere. The end result was that the gos lost her grasp on her prey. I stood with my mouth open, taking in what I had just witnessed yet again.

Falconry truly is beautiful: Mother Nature allowing a glimpse of what takes place each and every minute in her world. Looking back, this can only be described as one of the highlights of my falconry career - and I owe it all to the gos whose motto is "I KNOW I CAN .....I KNOW I CAN...I KNOW I CAN!"

# Rapter Digestive System

By Scott Craig

As we prepare and feed our feathered hunting companion's, ask yourself: "how much do we actually understand and appreciate the digestive process of our raptorial friends". Sure we may know what the consequences of under or over feeding can do, or the mess we have to clear off the wall of the mews, but how does this meal go from a chick or quail is being absorbed and eliminated in our feathered hunting partner.

The digestive tracts of different species of birds are in general much closer in design than different species of mammals. Each avian gastrointestinal system has evolved due to flight and diet specifications. The length of the bird digestive tract is much shorter and more efficient than mammals, which reduces volume and subsequent weight of the bird. Now the feathered hunter is able to perform its fast and agile aerial maneuvers to capture the next meal.

The beak has been adapted to the specific needs of the bird. It is connected to the skull by moving joints which allows movement of both upper and lower beak. The beak consists of bone, blood vessels and a tough outer (keratinized) surface that will grow out similar to our finger nails. Wild raptors are continually wearing the beak down by flecking the beak on branches, rocks and by tearing the meat off the bone of their prey. On occasion captive birds are unable to wear the beak down normally thus forcing the handler to cope (or trim) the beak back into proper alignment and shape.

Birds do not have a soft palate that separates nasal from oral cavity, but rather a single cavity. In this cavity the tongue and palate have small backward pointing spines or papillae, which help to direct the food into the esophagus. As the beak closes the palate moves backwards, directing the food down into the esophagus. Swallowed food then collects in the crop (a holding area) of hawks, eagles and falcons (falconiformes) and with in one half hour the saliva, softened foods are passed into the stomach- no digestion occurs within the crop. In owls (strigiformes) swallowed materials immediately fill the lower esophagus and glandular stomach (no holding area at all) and after several minutes the entire meal is passed into the muscular stomach.

The transfer of small amounts of food material from crop to stomach is termed "putting over". The hawk does this by a series of head movements. First stretching its head up, and then pushing the chin down in a flattening motion after wiggling the head from side to side.

The two stomachs of a bird consist of two parts; the proventriculus, which is glandular, and the ventriculus (or gizzard) which is muscular. In raptors the proventriculus and ventriculus merge together in a pear shaped structure. The proventriculus is lined with acid secretory cells which secrete strong peptic enzymes and hydrochloric acid. This acidity can digest most of the bones of their prey.

The gizzard has a thin, slightly cheesy, yellow layer called a cuticle or Koilin which is secreted by mucus cells. The cuticle protects the gizzard from the acidity produced from the proventriculus. This protective layer is constantly worn away providing that the bird has a normal diet of fur or feather. Some falconers provide "rangle" as in the form of

small pebbles that wear away the cuticle layer.

The feather and fur is slowly compacted every 20 to 30 seconds by the muscular contractions of the gizzard. Once the gizzard is almost full of unwanted matter, this pellet of unwanted matter is regurgitated by the muscular contractions and the reverse movements of the stomach and esophagus. Owls normally egest a pellet for each meal. Hawks may eat several meals before casting a pellet. In owls the stomach acidity is not as strong as hawks and falcons and cannot digest the bones of their prey; whereas, with hawks more bone digestion occurs in the stomach. Thus in hawk pellets less bone can be found in the egested matter, where as owls egests the majority of the bones of their prey. When examining owl casts whole prey skeletons can be observed. The regurgitated casts or pellets of hawks occur sometime around dawn, even if they have been fasted since the previous pellet. In owls, the meal to pellet interval is more closely related to the quantity of food eaten. Once the food has been liquefied and squeezed from the pellet formation within the ventriculus (gizzard), the ingested food is passed now in to the upper small intestinal tract for absorption.

The liver and pancreas both aid in the digestion and assimilation of the liquefied matter. The liver is quite large in the raptor - about 2.5% of the total body weight. The liver consists of two lobes, which are protected and cushioned from impact by the pectoral muscles, sternum and thoracic air sacs. The core of the liver activity is the metabolic processing of incoming nutrients. It also handles the competing demands placed on the bird by the various tissues of the body for maintenance, growth, egg production and reproduction. The liver also acts to detoxify the body and helps in the production of red blood cells. The liver's response to starvation can be often detected in the mutes. Often the normal brown to black fecal material will often be seen as a green colour. The green colour is actual bile pigment that has passed through the body and excreted outwardly.

The pancreas is located near the start of the small intestine. Proenzymes are produced in the pancreas which must be activated by an enzymatic trigger that turns the pancreatic non-active enzymes into the active form of enzymes for fat, protein and carbohydrate digestion and assimilation in the small intestine. Force feeding results in a decrease in the release of digestive enzymes from the pancreas as compared with self feeding. With pancreatic insufficiency the feces contain excess amounts of fat and starch and have a pale tan greasy voluminous appearance when mutes are observed.

The small intestines are made up of 3 different segments that allows for digestion and absorption of the food that is carried along by the "squish and push" action of the intestinal peristaltic waves. The lining of the intestines appears velvety to the naked eye. Here the walls are lined by tiny finger like projections call villi - these projections allow for a much greater surface area for the absorption of food. The intestine of a raptorial species is quite short and efficient. Raptors absorb as much as 66 to 88% of the energy of their ingested prey.

The gut length, from mouth to cloaca is approximately 135cm in the buzzard. Raptors that rely on their agility to capture agile prey (for example- Sharp-shins) have shorter, lightweight less efficient guts than the "searching hawks" such as Red-tails, which are more efficient at digesting their food.

Once all nutrition has been absorbed in the small intestine, waste product passes to

the final portion of the digestive tract. The large intestine, often referred to as the colon is primarily responsible for the re-absorption of water and electrolytes. Here bacterial fermentation results and bacterial and vitamin synthesis occurs. The cloaca is the termination site for the digestive system. It is formed by the coprodeum, where the rectum empties, the urodeum, where the kidney empties. The normal fecal material is brown or black. Urine and feces are often excreted together from the cloaca. Protein waste, appear as a chalky whitish substance called urates, and urine as a clear liquid. On the top surface of the rectal and urinary openings there lies a small lymphatic pocket called the Bursa of Fabricius. This helps to fight off infection that attempts to gain access into the gut.

The better that we know how the digestive tract digests and assimilates nutrients, the better this will allow us to monitor for signs of disease and stress. The raptorial species assimilates their food in a little different way than mammals. Undigested matter is compacted and expelled and the liquefied fuel passed to the lower intestines for use in a much more efficient and timely manner than mammals. The next article will outline some of the foods falconers give their feathered hunting partners and why some foods are better than others to feed.

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