

The Reindeer Handler

July 2021

Edition#5



An electronic magazine dedicated to health, and promotion of reindeer husbandry.

The Reindeer Handler

Regular features

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Science Article links

Antlers

[rapid antler growth](#)

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Illness

[clinically normal and sick reindeer](#)

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[Babesia Treatment Bronx Zoo protocol](#)

[Ruminant Disease Chart](#)

Vector problems

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[P. Tenius \(brainworm\) in reindeer](#)

[Rabies in reindeer](#)

Supplies needed:

Microscope – 10x at minimum to 40x power, light capabilities, camera option and/or options to show slide on laptop is very nice option, binocular (double viewing option) is suggested, but not necessary – single telescope optical option works too. Check out Lab sales for some really good deals on microscopes.



McMasters dual chamber slide



Pipette



Test tube or measured vial



Scale showing grams



Sugar solution or Fecasol floatation mixture



Timer

Disposable gloves

Popsicle stick or plastic knife

Small narrow glass to hold your test tube upright.

How to run your fecal test:

Using a plastic baggie turned inside out, wait for fresh poop, using your hand inside the baggie, gather up the poop with the baggie and then turn baggie right side out.

Take to where your microscope & equipment is set up.

Put a clean plastic baggie down on your scale and weigh out 3 grams of poop pellets. 3 grams is about $\frac{1}{2}$ - $\frac{3}{4}$ tsp of poop – you don't need much.

Put the 3 grams of poop in to your beaker/test tube and using the popsicle stick or plastic knife, smash the poop up very well.

Slowly add 25 ml of sugar solution or Fecasol. Slow is the key here, as you want to keep air bubbles to a minimum. Stir until solution and poop is well mixed in your test tube/beaker.

Have a stand you can use to sit your test tube upright in. I use a small narrow juice glass.

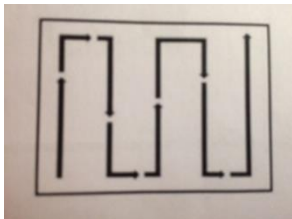
Let sit for 15 minutes.

Using your pipette, carefully siphon off the top layer of your watery mix.

Slowly (to avoid adding any air bubbles), inject solution from pipette in to the chambers of your McMasters slide. Fill both chambers.

Insert your slide on to your microscope viewing area. Turn on microscope light.

Align your slide so you can view the first chamber. Start viewing in lower left area and view while scanning in the following pattern:



Using your 10x power selection, view slide.

Start looking for worm eggs. At first, everything will look like a worm egg. But eliminate air bubbles, small hairs or lint and straw or hay, dirt, and you will begin to distinguish between eggs and everything else. Air bubbles are completely circular.

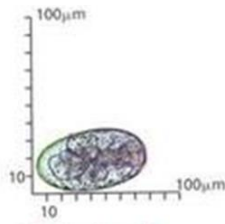
Every time you see an air bubble, make a mark on a piece of paper. If you count over 20 eggs, review with your vet to confirm type of worm and treatment.

See chart below for most commonly found parasites.

Guide to Internal Parasites of Ruminants

Sponsored by Intervet — providers of Panacur®/Safe-Guard® to the livestock industry.

The Goat Care Unit



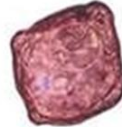
Ostertagia
(brown stomach worm)



Cooperia
(small intestinal worm)



Moniezia
(tapeworm - sheep)



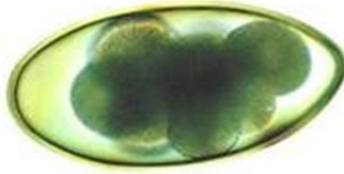
Moniezia
(tapeworm - cattle)



Bunostomum
(hookworm)



Haemonchus
(barberpole worm)



Nematodirus
(threadneck worm)



Trichostrongylus
(bankrupt worm)



Oesophagostomum
(nodular worm)



Trichuris
(whipworm)



Strongyloides
(threadworm)



Coccidia
(a protozoan that causes coccidiosis)



Dictyocaulus
(lungworm)



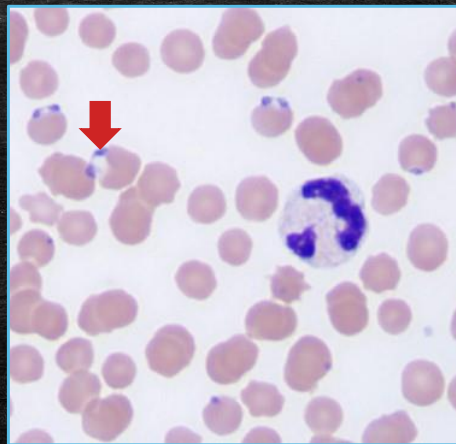
Mite Egg - 1/4 actual size
(contaminant - often mistaken for worm eggs)

Babesiosis in Reindeer

Dr. Ginger Hobgood
Veterinarian

What is Babesiosis

- Babesiosis is caused by a bite from a tick carrying the bacteria *Babesia*
- Multiple species of *Babesia* have been identified that can cause disease in animals as well as people
- The bacteria enter the host's bloodstream and becomes an intracellular parasite in the red blood cells



Tick Carriers



- Babesia is generally carried by the deer tick, *Ixodes scapularis*
- Ticks pick up the bacteria by feeding on infected hosts (other deer and rodents in particular)
- They can also pass the bacteria to their offspring
- Babesia is often spread by the Nymph in spring and summer, though the adults can also transfer the disease
- Infected pregnant animals have been known to pass the disease onto offspring

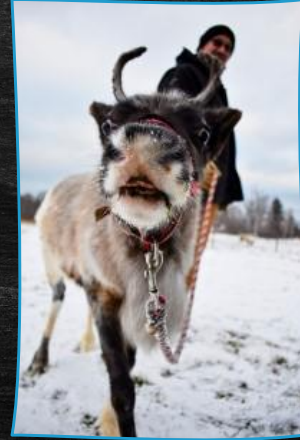
Disease Process

- Once bitten by an infected tick, systemic disease can occur as soon as a couple of days, but can stay latent for an extended period of time
 - The start of clinical signs is usually around a stressful period, like rut, calving, weaning, or transport



Disease Process

- As the bacteria replicates and infects more red blood cells (RBCs), the animal shows signs of illness (high persistent fever, depressed, anorexic)
- The bacteria then cause destruction of RBCs resulting in anemia
- The destroyed RBCs then cause damage in the kidneys and liver, as the body tries to filter out the destroyed cells
- It is at this stage that you can see the classic red urine as well as jaundice (yellow colored skin, eyes, membranes)



Disease Process (cont.)

- As the RBCs break apart, they also release enzymes that can cause low blood pressure and edema (fluid pocketing under the skin)
- These enzymes can also lead to further organ damage and slowed blood clotting times
- Other outward signs can include diarrhea, muscle tremors, abortion, neurologic weakness, muscle wasting, increased respirations, skin bruising or nose bleeds
- If left untreated, or if treated too late into the clinical progression, death is a common outcome



Diagnosis



- Babesia can be seen on a blood smear, but it's not always visualized during an infection
- PCR (a test that looks for the genetic material of the bacteria) is the best way to diagnose the disease
- Some farms choose to survey test their animals once or twice a year
- NC State University College of Veterinary Medicine will run this test

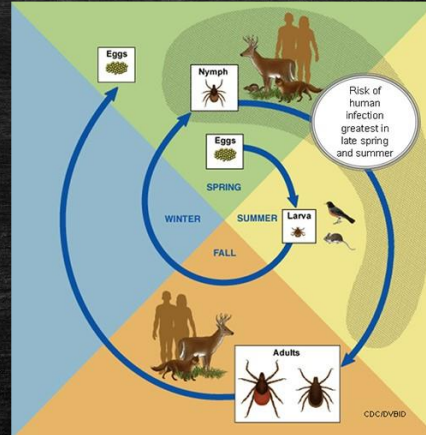
Treatment

- Mainstay treatment is Imidocarb Dipropionate (Imizol)
- A secondary antibiotic is added. The Bronx zoo used Penicillin and a Ceftiofur
- Supportive therapy is key! IV fluids, blood transfusions, vitamin E, and gastroprotectants (protonix)
- Hospitalization is vital to survival. Organ values need to be evaluated regularly, as well as RBC levels and blood gas values

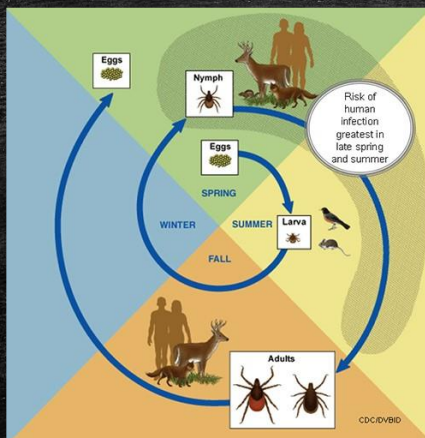


Prevention

- The nymphs, once full of a meal, return to the leaf litter until they molt into an adult in the fall
- At this point the females need to feed one more time before laying eggs, and then dying
- This is another time period where animals can become infected
- By reducing hosts and living environments, you can minimize the number of ticks in your fields



Prevention



- Prevention begins with tick control!
- Adult females lay their eggs in leaf litter, and once hatched the larvae will find a host. Rodents and birds are common first hosts. The larvae then detach from their host to lie dormant in the leaf litter, as it turns into a nymph.
- Nymphs then crawl up low lying vegetation to attach to its next host (rodents, birds, deer, humans, dogs etc.)
 - This part of the cycle commonly occurs during spring and early summer, this is when animals are most likely to contract babesia

Stopping the Cycle

- Remove any dead vegetation
- Do not let grasses grow tall, instead mow and remove clippings
- Rodent and wild bird control
- Ticks have been known to crawl several feet towards a host, so having a natural 'dead barrier' around your fields can be helpful
 - For example, a gravel barrier around the pastures
- Guinea fowl or chickens can help eat ticks in your pastures
- Opossums also eat ticks. It has been estimated they eat up to 5000 ticks every season!



Other preventatives

- You can use permethrin products as tick repellants for your animals, though you can't completely rely on this coverage
- There are some homeopathic options as well, but it is difficult to get full coverage
- Stopping the cycle of the tick is your best preventative!
- If you choose to test yearly, or biyearly, any animals that come up as positive should be treated immediately



Resources

- <https://agriculture.vermont.gov/public-health-agricultural-resource-management-division/plant-health-and-pest-management/ticks>
- https://www.cdc.gov/parasites/babesiosis/gen_info/faqs.html
- https://eclinpath.com/hematology/infectious_agents/babesia/reindeer-babesia/
- <https://vetmed.illinois.edu/wildlife/2019/06/05/the-helpful-opossum-2/#:~:text=The%20humble%20Virginia%20opossum%2C%20America's,estimated%20%2C000%20ticks%20every%20season!>
- <https://www.health.ny.gov/publications/2825/#:~:text=Deer%20ticks%20live%20in%20shady,and%20around%20old%20stone%20walls>
- <https://www.merck-animal-health-usa.com/product/imizol>
- <https://wisconsin-ticks.russell.wisc.edu/ixodes-scapularis-life-cycle/>
- Bartlett, Susan L., et al. "Diagnosis and Treatment of Babesia Odocoilei in Captive Reindeer (Rangifer Tarandus Tarandus) and Recognition of Three Novel Host Species." *Journal of Zoo and Wildlife Medicine*, vol. 40, no. 1, 1 Jan. 2009, pp. 152-159., doi:10.1638/2008-0011.1.

Apthorp Farms Inc. encountered H. Contortis (Barber pole) in 2015. After the death of a 4-month-old heifer calf, and 2 bulls into 2017 we were at a crossroads to sell our only cow reindeer or keep going. After an extensive worming and fecal check protocol as well as medication cocktail and feed for anemia we awaited a fungus research option for pasture management we were alerted to via our vet, an OSU graduate. In 2019 Livamol with Bioworma (available directly online) or Bioworma (concentrate available thru veterinarians, licensed feed stores) became available in the United States from Australia. We are now underway to become an authorized seller in 2 months after back orders become available. If you are dealing with Barber pole and still testing positive yearly and looking for alternatives to wormers, feel free to discuss this product with your veterinarian. If your vet has questions feel free to reach out to our vets at the Animal Hospital of Waterford, for vet to vet consult at 814-796-6115





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BioWorma

BioWorma

Targets parasitic roundworm larvae (including chemically resistant and multi-resistant)

**The World's FIRST Biological Control
for Grazing Animals.**

Breaks the Worm Cycle

Adult roundworms in abdomens or intestines

Roundworm larvae in dung pat

Substantially reduces recontamination onto pasture

BioWorma is effective when fed to grazing animals like sheep, goats, cattle, horses and others including deer, alpacas and zoo animals.



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Livamol with
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Breaks the Worm Cycle

LIVAMOL with BioWorma

Substantially reduces recontamination onto pasture

BioWorma is effective when fed to grazing animals like sheep, goats, cattle, horses and others including deer, alpacas and zoo animals.



LIVAMOL® with BioWorma®

BIOLOGICAL CONTROL CONTAINING THE SPORES OF A FUNGUS THAT CAPTURES AND CONSUMES INFECTIVE NEMATODE LARVAE WITHIN THE MANURE OF GRAZING ANIMALS

PRESENTATION: A highly palatable, green free flowing fine meal.

ACTIVE CONSTITUENTS: Contains a minimum of 30,000 colony forming Units/gram of *Duddingtonia flagrans* IAH 1297.

Guaranteed Analysis		
Crude Protein (Min) 20%	Crude Fat (Min) 5%	Crude Fibre (Max) 16%
Calcium (Min) 4%	Calcium (Max) 6%	
Phosphorous (Min) 1.5%	Fluorine (Max) 0.025%	
Vitamin A (Min) 27,000 IU/lb	Vitamin D3 (Min) 54,000 IU/lb	Manganese (Min) 104ppm

PROPERTIES: LIVAMOL® with BioWorma® is a palatable feed supplement intended for further mixing into feed and that contains the spores of *Duddingtonia flagrans* strain IAH 1297 as BioWorma®, a fungus found in soil and pasture that has been combined with Livamol® (see below). BioWorma® is a biological control for the free-living stages of the listed parasitic gastrointestinal nematodes (as listed below) of grazing animals and acts by substantially reducing the numbers of infective worm larvae (including chemical/anthelmintic multi-resistant larvae) emerging from manure onto pasture. When fed to grazing animals, the thick-walled spores remain inert (having no effect within the host animal) and resist digestion, passing through into the manure. Within the manure, the spores germinate and form trapping organs that capture, paralyze and consume emerging infective worm larvae (including chemical/anthelmintic multi-resistant larvae). The crucial re-infestation stage of the parasites' life cycle is interrupted, reducing the amount of re-infection from contaminated pasture. This interruption of the life cycle reduces parasitic nematodes on pasture. There are no negative effects on non-target soil nematodes, earthworms, microarthropods etc.

Biological control with *Duddingtonia flagrans* is applicable to the larvae of: SEE LABEL FOR FULL LIST

Sheep & Goats: Barber's Pole Worm or Wire Worm (*Haemonchus* spp.), Black Scour Worm or Hair Worm (*Trichostrongylus* spp.), Brown Stomach Worm (*Teladorsagia* (*Ostertagia*) spp.), Nodule Worm (*Oesophagostomum* spp.), Thin-necked Intestinal Worm (*Nematodirus* spp.) and Hookworm (*Bunostomum* spp.).

Cattle: Barber's Pole Worm or Wire Worm (*Haemonchus* spp.), Brown Stomach Worm (*Ostertagia* spp.), Black Scour Worm or Hair Worm (*Trichostrongylus* spp.), Hookworm (*Bunostomum* spp.), Intestinal Worm (*Cooperia* spp.), Thin-necked Intestinal Worm (*Nematodirus* spp.), Nodule Worm (*Oesophagostomum* spp.).

Horses: Large strongyles (large red worms), including *Strongylus* spp., *Triodontophorus* spp. and *Oesophagodontus* spp., small strongyles (small red worms or cyathostomes), including *Cyathostomum* spp., *Cylicocycylus* spp. and *Cylicostephanus* spp., Stomach Hair Worm (*Trichostrongylus axei*), Ascarids (*Parascaris equorum*), Threadworms (*Strongyloides westeri*) and Pinworms (*Oxyuris equi*).

Other grazing animals: including Deer, Alpacas and zoo animals

DOSAGE AND ADMINISTRATION: Abridged see DIRECTIONS FOR USE on label and read carefully

1. Treat animals with a suitable chemical wormer.
2. Move treated animals onto low worm pasture (ideally not grazed by the same animal species for a minimum 6 weeks).
3. Commence daily use of Livamol® with BioWorma® to minimise pasture infectivity and maintain the animal's low worm status.
4. Thoroughly mix Livamol® with BioWorma® with feed or feed supplements. Livamol® with BioWorma® will begin to work immediately within the manure.
5. Recommended for strategic use during periods when weather conditions are conducive to larval development and transmission on pasture at temperatures above 5° Celsius (40° Fahrenheit) throughout the year.
Use in conjunction with a recommended worm management strategy program for your area.

DAILY FEEDING RATES							
LIVAMOL® with BioWorma® according to bodyweight. For oral administration							
Bodyweight * (lbs)	50	100	200	300	500	750	1000
Dosage (oz./animal/day)	0.8	1.6	3.2	4.8	8.0	12.0	16.0

* Apply according to heaviest animal in the group.

** Use additional 1.6 oz. for each 100 lbs above 1200 lbs.

REGULATORY STATUS: USA: EPA Reg. No. 91253-2 **Australia:** APVMA No. 82646 **New Zealand:** ACVM No. A011335

PACK SIZES: 15lbs (6.8 kg) 30 lbs (13.6 kg)

www.bioworma.com
Email: info@iahp.com.au
Website: www.iahp.com.au

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04/2019

Hi Deb,

As per the datasheets that Tara sent, BioWorma is the more concentrated form, with a usage rate of 0.1 oz/100 lb bodyweight daily. On the other hand, Livamol with BioWorma contains the same active ingredient, but has a higher usage rate of 1.6 oz/ 100 lb bodyweight daily as it is based on the nutritious carrier Livamol. Livamol is very palatable and its nutrients will assist the immunity of your herd, which plays an important role in their ability to resist worm infections. Both products will be suitable for your herd, the choice between the two depends on what fits best within your overall feeding and nutrition program. Please note that the label states that BioWorma is only available to veterinarians, premix companies and feedmills, whereas Livamol with BioWorma is available to all.

With best regards,

Kevin.

Kevin Healey

Research & Development Manager

Mobile: 0417 269 193

Email: khealey@iahp.com.au

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BIOWORMA®

BIOLOGICAL CONTROL FOR FURTHER MIXING INTO FEED, FEED SUPPLEMENTS, PREMIXES OR CONCENTRATES THAT CAPTURES AND CONSUMES LARVAE WITHIN THE MANURE OF GRAZING ANIMALS

PRESENTATION: Grey to brown free flowing fine meal.

ACTIVE CONSTITUENTS: Each gram contains: a minimum of 500,000 chlamydozoospores of *Duddingtonia flagrans* IAH 1297.

PROPERTIES: BioWorma® contains the spores of *Duddingtonia flagrans*, a natural fungus found in soil and on pasture. It is a non-chemical biological control for the free-living stages of parasitic gastrointestinal nematodes of grazing animals, which acts by substantially reducing the numbers of infective worm larvae (including chemical/multi-resistant larvae) emerging from manure onto pasture. When fed to animals, the thick-walled spores remain inert (having no effect within the host animal) and resist digestion, passing through into the manure. There they germinate and form trapping organs that capture, paralyse and consume emerging worm larvae (including chemical/multi-resistant larvae), interrupting the crucial re-infection stage of the parasites' life cycle, thus reducing the amount of re-infection on the pasture. The spores are safe, non-toxic and residue-free. There are no negative effects on non-target soil nematodes, earthworms, microarthropods etc.

Biological control with *Duddingtonia flagrans* is applicable to the larvae of: SEE LABEL FOR FULL LIST

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4. Thoroughly mix BioWorma® with feed or feed supplements. BioWorma® will begin to work immediately within the manure.
5. Recommended for strategic use during periods when weather conditions are conducive to larval development and transmission on pasture at temperatures above 5° Celsius (40° Fahrenheit) throughout the year.
Use in conjunction with a recommended worm management strategy program for your area.

Bodyweight* (lbs)	25	50	100	200	300	400	500	750	1000	1200
Usage rate (oz. per animal per day)	0.025	0.05	0.1	0.2	0.3	0.4	0.5	0.75	1.0	1.2

*Apply according to heaviest animal in the group.

Use additional 0.1 oz. for each 100 lbs above 1200 lbs.

REGULATORY STATUS: USA: EPA Reg. No. 91253-1 Australia: APVMA No. 82645 New Zealand: ACVM No. A011334

PACK SIZE: 4.4 lbs (2.0kg), 15 lbs (6.8 kg), 30 lbs (13.8 kg) and 55lbs (24.9 kg)

www.bioworma.com.au
Email: info@bioworma.com
Website: www.iahp.com.au

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04/2019



Updates

2020 Annual report

<https://www.aphis.usda.gov/aphis/ourfocus/animalhealth/animal-disease-information/cervid/voluntary-cwd-hcp-annual-update-fy2020>

The Cavalry Group take action

<https://the-cavalry-group.rallycongress.com/>

Congressional Directory by State

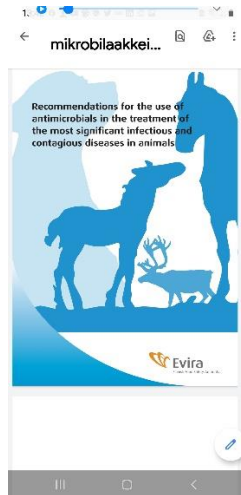
<https://the-cavalry-group.rallycongress.com/congress>

Legislation by state 2021 pending legislation

<https://www.thecavalrygroup.com/resources/Documents/Cavalry%20Group%20Word%202021%20Master%20List%204.25.21.pdf>

HSUS passed legislation

<https://www.thecavalrygroup.com/HSUS-Ballot-Initiatives-PASSED>



New research article on antimicrobials with reindeer specific info
(always remember to share with your veterinarian and never uses as a
substitute for veterinary care!)

“Recommendations for the use of antimicrobials in the treatment of
most significant infectious and contagious diseases in animals”

Evira – Finnish Food safety Authority&

The Faculty of Veterinary Medicine at the University of Helsinki

https://www.ruokavirasto.fi/globalassets/viljelijat/elaintenpito/elainten-laakitseminen/hallittu_laakekekeytto/mikrobilaakekaytonperiaatteet/mikrobilaakkeiden_kayttosuositukset_en.pdf

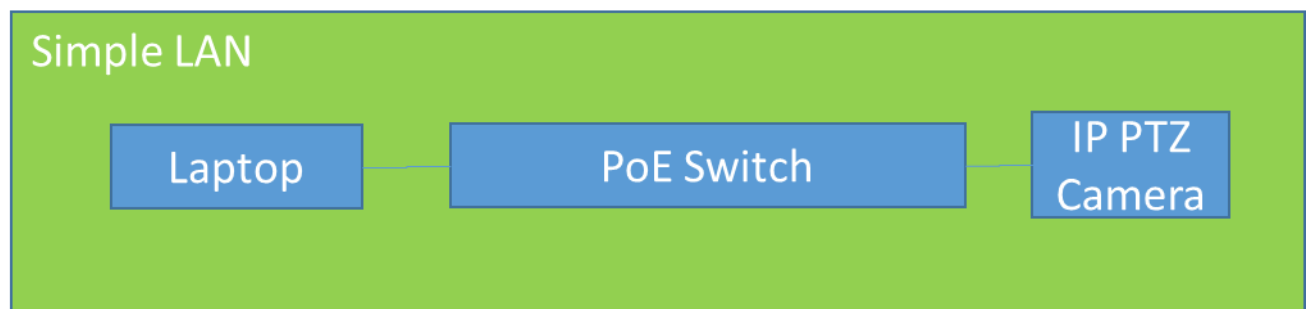
Monitoring and Marketing Reindeer Electronically

By Scott Apthorp, Apthorp Consulting Inc.

As this is the first article of hopefully many, introductions are in order along with the intent of this article. My wife Deb and I have been in the reindeer adventure since 2012 under Apthorp Farms Inc.; while I have also been a technology professional for better than 35 years at many companies large and small including my own. With that in mind, the goal for this and future articles will be the beneficial application of technology to the reindeer experience (yours and the public's) along with encouraging all of us to share experiences, questions, and expertise.

It's that cold snowy winter night, when the intuition is kicking you that something might be wrong with one of your reindeer. I don't know about you, but the older I get the less enjoyable that particular trip is to the barn and often, as your head is just about to hit the pillow, you are headed right back out again. So before we take up permanent residence in the barn or never sleep again for fear of missing something, let's explore some technology options that can be upgraded from an expense to an income.

Initially, we are going to limit this design to a LAN (Local Area Network) without an Internet connection or myriad of other technologies involved. We simply want to go from the barn to a device on property to see what's going on with our reindeer. I am using IP (Internet Protocol) based technology as opposed to CCTV (Closed Circuit Television) because the intent is to grow this into a more commercial for profit system as we go without re-purchasing equipment with similar purpose later on. The following diagram depicts our simple LAN that we will grow into a more complex system in the future.



First we need at least one IP camera, I suggest start with one and learn it's capabilities before rushing out and buying more. Specifications for cameras can tell you many things and help minimize the choices in your purchase decision but how it actually performs for your expectations and environment is more of a trial and error process. Gathering information from other users of a particular device with similar environment will save you a lot of grief.

One of the first options to consider in a camera is fixed or PTZ (Pan Tilt Zoom). Fixed gives you a dependable view of a non-moving target, useful for monitoring critical areas that don't move or if something is moving thru an area to capture that moment possibly even alerting you. PTZ on the other hand gives you the flexibility to move your view in a semi sphere area and even zoom in to see more detail. For this design, we will focus on a PTZ camera as reindeer have a tendency to move around but it should be noted the fixed cameras are an integral part of a good system design when it comes to monitoring pass-throughs, critical facility or who comes on property.

Other camera options in our design worth noting are, PoE (Power over Ethernet) capability, infrared vision, outdoor rating and audio. PoE is the devices ability to be powered by network cable as opposed to a standard electrical connection. The option adds a level of convenience and cost savings when running cable(s) to your device. PoE is considered a low voltage power and doesn't require the installation an outlet near your camera. Local ordinances may require you to have a qualified electrician do an outlet install which would be an additional expense whereas the network cable can be done be yourself. Infrared vision is useful for nighttime viewing of your reindeer and is outside of their visible spectrum so they will not be alerted by the light it creates (Reindeer can alert to the noises of PTZ cameras while performing a position change.) Your typical farm environment including inside the barn usual warrants an outdoor rating. Audio capability for PTZ cameras requires a little extra wiring and usually includes the microphone so you can hear as well as see what's going on. The speakers for an audio setup however are an additional expense.

Once you have your camera a "best view" location needs to be chosen. We will have future articles on camera reviews and location choices. Hopefully a few farm examples as well.

As we are using a PoE capable camera we'll choose a PoE switch to connect all the network devices we use. Equipment that is not PoE capable can still be plugged into a PoE capable switch. The PoE switch does two things for us, it provides the power necessary to run the camera and it allows the camera to communicate to the rest of the network. The PoE switch does need to be rated to supply the power needs of all PoE devices you run off of it. For example a typical camera may require 35 W (Watts - Unit of Electrical Power), if you expect to run four cameras from this switch it needs to have a rating of 4 times 35 W or 140 W at a minimum.

Now you're probably wondering I have two devices to connect, what type of wire do I connect them with? Network cable has many detailed specifications and ratings (a quick Internet search will give more than most will ever want to know) so for this simple design we will use a CAT5e rated off the shelf cable already terminated to length and ready to use. The maximum rated length of cable distance from switch to device is 300 feet so keep that in mind when you're laying out your own network.

Finally physically connect your laptop to the PoE switch the same way you just did for your camera and assign a network IP address to the NIC (Network Interface Card) in your laptop. It needs to be in the same range as your IP camera so they can communicate. See your IP camera manual for its particular initial setting (usually in the 192.168.x.x range). Open your favorite Internet browser plug in your camera IP and your nights of running to the barn are over.

I know I didn't cover everything in gruesome detail and I tried to keep the focus simple. Please email me with any questions or comments at scott@aphorpc consulting.com.

Congratulation's page.

Always looking for recognition of reindeer, reindeer farmers, veterinarians, support staff or researchers

This month Congratulations to Ohio State University ribbon cutting on the Frank Stanton Veterinary Spectrum of Care Clinic

Celebrate the opening of the Frank Stanton Veterinary Spectrum of Care Clinic

**Tuesday, June 1, 2021
4:30 p.m. EDT
on Zoom**

Please join us for a virtual ribbon cutting ceremony to experience the new, innovative learning environment that will be the home of our Community Practice service. You'll have the chance to learn more about the clinic and take a tour led by our fourth-year students before we open the doors with a special surprise.

[The Frank Stanton Veterinary Spectrum of Care Clinic](#) is a state-of-the-art teaching facility that enhances the student experience by providing a working-and-learning environment modeled after a private small animal general practice clinic. Students will learn and apply clinical reasoning and problem-solving skills to cases and consider all veterinary care options available to patients and their pet parents to make affordable veterinary care accessible across the broadest socioeconomic spectrum.

Register

We strive to present accessible events for the Ohio State community. If you require additional accommodations, such as live closed-captioning or interpretation, to participate in this event, please email Sabrina Jackson at jackson.2620@osu.edu. Requests made by May 28 will generally allow us to provide seamless access, but the university will make every effort to meet requests made after this date.



THE OHIO STATE UNIVERSITY

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A view of a wonderful gift shop, A look at The Snowman's Reindeer Farm in Canton, Illinois, Photos and gift information by Tracy Snowman.





Gift Shop Hot Tips Tracy Snowman

Gift shop items can increase income for farm visits. We have found that the most popular items are always stuffed animals. The two companies we have worked with the most are Aurora World and Ganz. These two companies will enable you to set up a wholesale account (if you have a business tax ID) and purchase the items at approximately half of the retail price. There are price breaks for quantities and bundles. Items that retail for under \$20 always sell the best. Pictured are some of the items that sold well in 2020 and have been reordered for 2021. If you want to start small or have limited space available, the two things you must have are stuffed animals and personalized farm items (items with YOUR farm name on it). We get a number of items from 4Imprint.com such as mugs, notebooks, pencils, pens and blankets. They also can do t-shirts and apparel. They are great to work with and have a fast turn-around time. We always offer ornaments too by stuffing reindeer fur in a clear ornament and putting either a custom label or ribbon on it. These provide significant mark-up ability and are extremely popular. There are many ways to personalize objects such as putting on stickers, stamping or wood burning. One of our strategies is to scour after Christmas sales for 75-80% markdown items. We buy them up (because they are cheaper than wholesale), customize them with a sticker or wood burned logo and mark them back up to full retail in our gift shop. The more mark-up you have, the better so getting things at a big discount or making them yourself definitely gives you more room to make a profit.

If you get to a point where you want to grow your gift shop, consider going to a trade show or market. There are large shows in Vegas, Atlanta and other parts of the country. These shows will enable you to see lots of merchandise, talk directly to company representatives and get discounts that aren't available otherwise. It will cost \$2,000-\$3,000 for two people to attend (travel, hotels, meals, etc.), but you can save \$5,000-\$6,000 in discounts if you are buying a lot. We have approximately 800 square feet of gift shop space and it takes about \$25,000 per year to stock it. Annual sales (open 10 weekends a year) are usually \$40-50,000.