



## ***Newsletter – Summer 2020***

### **President's Report:-**

As we enter the summer months we still see an uncertain landscape for our industry in the short term. However, as an Association, we wish to continue to move forward to address the needs and concerns of the members of the Purebred Sheep Breeders Association of Nova Scotia.

Due to the onset and continuation of the current Health Emergency, we have looked into how we can meet your needs in a more responsive manner.

To reiterate the changes in our activities on behalf of the membership, I note the following:

There will be **no** Physical Purebred Sale in Truro this year (2020) and upon review of poll result;  
There will be **no** Virtual Purebred Sheep Sale conducted by PSBANS this year (2020)

In order to assist our Breeders with the sale of Purebred Breeding Stock, and help the commercial industry in getting the genetics they require this year for a vibrant industry we are producing an On-line Breeders Directory (see further in this newsletter) for release in September. Breeders are encouraged to submit their data, and include advertisements. We will be providing a limited number of "print" copies for producers who have limited internet access - upon request.

We are open to examining other ways in which we can help bridge over this time of uncertainty, so if you have any suggestions or questions, please contact our Secretary Cathy Vallis, or any of the Directors.

As well, we will be holding our Annual General Meeting in November in the form of a Virtual Meeting, to be held on November 7<sup>th</sup>, 2020.

If you require assistance or support from your fellow Breeders, do not hesitate to ask. As well, do not hesitate to check up on other producers and neighbours to see if they may need help. We are here to support each other.

Andrew Hebda  
President PSBANS

## From the Farm Gate:-

Recipe submitted by Janessa Henry, Director of PSBANS, thank you.

### **Port Braised Lamb Shanks**

- 4 lamb shanks (approx. 400g each)
- Salt & pepper
- 2 tbsp olive oil
- 2 garlic cloves, minced
- 1 onion, finely chopped
- 1 celery stalk, finely chopped
- 1 carrot, chopped
- ¼ cup flour
- 2 cups beef broth
- 3 cups of Port
- 1 ½ cups more beef broth
- ¼ cup tomato paste
- 2 tsp thyme
- 3 bay leaves
- 4 stalks fresh parsley

1. Season lamb with salt and pepper.
2. Heat 1 tbsp oil in a heavy pot over high heat. Brown the lamb shanks.
3. Turn heat down to medium, add remaining oil, garlic, onion, carrot and celery. Sauté until soft.
4. Add flour and then remaining ingredients, lumps are ok at this stage.
5. Add lamb back to pot and bring to a simmer and cover.
6. Simmer for 2 hours then remove lid and simmer for another 30 mins
7. If wanted, strain sauce, increase the heat and reduce until thickens to form a gravy. Gravy tastes great over mashed potatoes.

## Producer Profile:-

### Zillig's Farm - the sheep part.

Gernot & Edith Zillig, having emigrated from Germany in the early 1950's, purchased, a place overlooking the Kennetcook River, near Scotch Village, in Hants County, in 1958. Being firmly of the mind 'not to have all their eggs in one basket' and with a diverse agricultural background, they set out to develop a mixed farm. Their original acquisition consisted of 150 acres, with fields, salt marsh and bushland, an old house believed to have been built in the 1770's and a very large, hip-roofed barn. Adjacent farm land and a small woodlot were added in 1966. Through trial and error, the couple soon realized the soil and location were not well suited for horticultural or field crop production, so they focused on building up a variety of livestock herds / flocks, including Jersey cattle, Yorkshire swine, sheep and domestic waterfowl. In early December, 1967, the hip-roofed barn, with livestock and fodder contents, was lost by fire. Subsequently, for housing sheep and hay, a pole barn, incorporating slatted flooring was constructed and remains in use.

In their first year here, the Zillig's started into sheep with 6 mature crossbred Suffolk ewes obtained in the Annapolis Valley. When these lambed, it quickly became apparent that some of them should have been culls! They had no milk (due to mastitis under previous ownership?)! Lambs had to be bottle fed. It happened that, early in that particular spring, a local man who had contact with construction sites in Halifax, appeared on the farm accompanied by several Italian immigrant construction workers, looking for lambs for their traditional Easter fare. Although the lambs out of those old Suffolk ewes were still quite small (30 – 40 lbs live), this was exactly what the Italians wanted, and Gernot, realizing his wife had her hands full with farm, household and two very small children, agreed to sell some of those lambs so Edith's work of bottle feeding would be reduced. The following spring, these Italians returned, this time bringing along a Greek shoemaker from Halifax, who was anxious to get some slightly heavier lambs for the Orthodox Easter as well. This was 1959 – 1960. So began the Zillig's Easter lamb business, which continues to this day!



Zillig Dorset ewes on pasture, Fall, 2005

Starting up, trying to find their way in a new land, Gernot and Edith recognized a potential opportunity and set about finding out which kind of sheep, available in this country, might be best suited for early lamb production. (The breeds here were completely different than those they were familiar with in continental Europe.) They hit upon the Dorset and in 1960 the first ram of this breed, then in horned form, was obtained from Mr. & Mrs. Phillip Porter, Lakeville, Kings County. With further research, they learned of the then recently developed Poll Dorset and in 1963, they were able to purchase lamb breeding stock of this type from Eleanor & Jack Gartshore, Dundas, ON, one of the two breeders who first brought polled Dorsets into Canada. From this foundation, more of the Gartshore's "Auchinburn" bloodlines were added, until that flock was dispersed (late 1970's?). Rams or ewe lambs were bought sight unseen, based on Mrs. Gartshore's assessment, and, in the early years, sent down from her Ontario farm in a crate by rail! Since then, select polled Dorset genetics have been brought in, often by artificial insemination with British and Australian Dorset semen; the aim being to stay with the traditional or true type Dorset. (This flock would thus now represent one of the longest,

continuous breeding of this type of polled Dorset in Canada.) The first Zillig Dorsets were registered with Canadian Livestock Records in 1965 and we have been members of the Canadian Sheep Breeders Association (CSBA) since then.

Over the years, a few other breeds, including Suffolk, colored wool Romney and East Friesian, have been part of the Zillig's commercial flock, for various purposes. Both purebred and crossbred stock has been enrolled, since 1976, in performance evaluation programs (ROP; Ovissey; GenOvis), when available. The Zillig flock peaked in the early 1990's at 350 – 400 ewes; with subsequent loss of family manpower it is now at 90 – 100 ewes, shepherded by a workforce of one! These are run as two flocks, one to lamb in winter, specifically to produce lambs for the Greek Easter, the other to lamb in late spring for fall freezer lamb sales.

As to marketing, in addition to supporting the annual Atlantic Sheep Sale with a few consignments, and occasional private sales of breeding stock, many of the market lambs, as well as other farm products, are sold to the end consumer (aka "direct marketed"). For example, some families have been getting their Easter lamb or their Christmas goose from the Zillig farm for over 50 years! Lambs not needed for direct sales are usually sold to Oulton's Meats, in nearby Windsor, or occasionally shipped to Northumberland, G. & E. Zillig having been among the original members of this lamb marketing co-operative based near Truro.

Gernot and Edith's son, Manfred, and daughter, Margarete, each continue the family's farming vocation: Manfred, together with partner Lois Brown, at Lindencrest Farm, with a commercial sheep flock, Limousin cattle, and some small stock. Margarete is at the home place, endeavoring to continue with the Poll Dorsets ... and sundry!



Zillig AVK 44R @ 9 yrs. of age with triplets, 24 hrs. old. 2014

**\*\*Note** since restarting this Newsletter participants have been chosen by me, Cathy Vallis. I am hopeful that some of our members might volunteer to participate as it is a great way of communicating what you do and why you do it. So anyone wishing to submit a paragraph or two, up to a page and a couple of photos is more than welcome to submit them for our Fall Newsletter. Hope to hear from you!



## Ask “Ted”:-

### ICEBERG DISEASES IN SHEEP

Iceberg diseases: For each animal showing clinical signs of one of these four significant diseases in a flock or herd, which can be viewed as the tip of an iceberg, many others ‘below the surface’ can be infected and in the process of developing lesions but not showing any clinical signs. Maedi-Visna (MVV), also called Ovine Progressive Pneumonia (OPP), Caprine Arthritis-Encephalitis (CAE), Paratuberculosis or Johne’s Disease (JD) and Caseous Lymphadenitis (CLA) are chronic diseases of economic importance for the small ruminant industry in most countries. These iceberg diseases share a common point: many of the infected animals will go unnoticed, often for years, while they are contributing to the spread of infection in the flock. Iceberg Diseases are also referred to as Production-Limiting Diseases since the infected animals ‘below the surface’ often do not produce as well (poorer growth rates, BCS’s, litter size, low weaning weights) and therefore limit the overall production of the flock. The introduction of an infected animal into the flock has been described as the principal transmission route between flocks, emphasizing the importance of controlling animal movements and testing animal prior to their introduction.

### Caseous Lymphadenitis

Caseous lymphadenitis (CLA) is an infectious bacterial disease of small ruminants that causes abscesses in external and internal lymph nodes (‘Chessy Gland Disease’). In a Quebec abattoir survey of approximately 1000 culled ewes only 26% of those with CLA had external abscesses (abscesses of the external lymph nodes in the head, neck, prescapular or prefemoral region). The rest had internal abscesses (in the lungs, liver and abdomen). Internal abscesses can cause the ewe to be culled because she is extremely thin (part of the ‘thin ewe syndrome’). *Take home: one case of CLA, as recognized by external abscesses, may indicate three other undetected cases with internal abscesses.*

One source of transmission is open, draining abscesses. Another source is respiratory secretions from internal lung abscesses. *Based on the abattoir findings noted above, that thin poor-doing ewe we hang onto could be a source for maintaining CLA in our flocks.*

### **Paratuberculosis (Johne's Disease)**

Paratuberculosis (Johne's Disease or JD) is a chronic, infectious, untreatable disease that can be another cause of thin ewe syndrome. The identification of infected animals can be hazardous due to the poor sensitivity of diagnostic tests, particularly for subclinical paratuberculosis. Spread of this disease is by the faecal-oral route. Once an animal tests positive for JD it is likely shedding massive numbers of organisms in its faeces. Infection is dose and age dependent: the higher the dose (the greater the faecal contamination of the environment, especially in confinement) and the younger the animal, the more likely it is that it will become infected. The main route of spread is from infected adults to young lambs. In a Canadian survey the prevalence of JD was 83% in dairy goats and 67% in dairy sheep.

### **Ovine Progressive Pneumonia OPP (Maedi Visna Virus / Virus MVV)**

Ovine Progressive Pneumonia (also called Maedi Visna) is a chronic, slowly progressive, untreatable, eventually fatal viral lung infection. It also cause hard bag. Historically, it was thought that colostrum was the main source of transmission of OPP or MVV. It is now recognized the bulk of transmission is respiratory, from the respiratory secretions of infected adults to the lambs, under conditions of prolonged contact. Thus there is a greater number of titre positive sheep in flocks that use prolonged, close contact, indoor housing compared to flocks that spend most of the year at pasture.

Caprine Arthritis Encephalitis virus (CAE) is a related virus in goats that causes crippling arthritis and/or brain infections. Use of colostrum from CAE positive goat does can cause sheep to test positive for OPP.

Interestingly, some sheep that seem to have repeated bouts of failing health and then show 'spontaneous' recovery are OPP infected. *That poor-doer we are keeping because she is a favourite or always has twins etc. may be a persistent source of OPP or Johne's Disease in our flock.*

As excellent update on MVV "What does it mean to your flock", written June 2020 by Dr. Paula Menzies, is attached to this Newsletter, with permission.

Kindly submitted by:

Dr. Ted Semple,  
Maritime Genetics

### **Membership Dues:-**

Just a quick note, attached to this Newsletter is a membership form for anyone who would like to renew their membership for this year prior to the Virtual AGM on Nov. 7<sup>th</sup>, 2020. Membership also give a free listing in the Breeders Directory and other listed benefits.



# Maedi Visna

## What does it mean to your flock?



ONTARIO  
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DEPARTMENT OF POPULATION MEDICINE

Dr. Paula Menzies  
Professor Emeritus

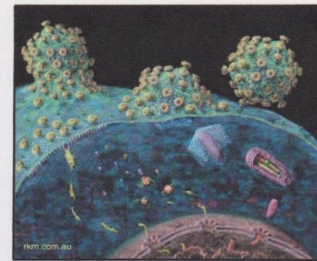


### What is Maedi Visna?

- AKA ovine progressive pneumonia (OPP)
- Chronic viral disease of sheep
- Causes pneumonia, hard udder and weight loss in mature sheep
- Infection is for life
- Common in Canadian sheep flocks

### What Causes Maedi Visna?

- Maedi visna virus (MVV) is related to CAE virus in goats
- Replicates in the body using the DNA of the host cells
- Infects white blood cells as well as cells associated with the target organs
- Targets the udder and lungs, less so the brain and joints



New virus particles emerging from an infected cell  
rkm.com.au

### Disease Due to MVV

- White blood cells attack the body's cells that are infected with MVV
- Inflammation leads to chronic damage of the target organs; damage accumulates through the animal's life
- Signs of disease start to emerge when animals are 3 to 5 years of age
- *Subclinical disease*: lowered milk production which affects lamb growth, exercise intolerance (lags behind flock); most infected sheep fall into this category
- *Clinical disease*: chronic pneumonia, increased respiratory rate, no response to antibiotics, hard udder, reduced appetite and weight loss; this can affect 10% to 30% or more of the flock depending on prevalence of infection and age of the ewes
- *Uncommon disease*: neurological signs with weak hind quarters and down; enlarged knees and stifles



Lungs of an affected ewe at postmortem. Note the enlarged, heavy, tan-coloured lung lobes and mucus in the trachea.



At lambing, the udder feels uniformly firm; milk is scant but normal in appearance.



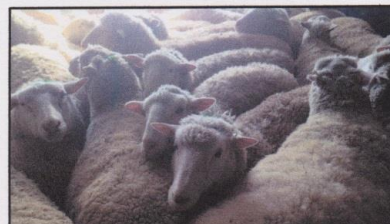
## Maedi Visna : What does it mean to your flock?



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### How is MVV Transmitted from Sheep to Sheep?

- Most virus is transmitted from infected cells that contact mucous membranes (eyes, nose, mouth, vaginally) or are swallowed
- *Respiratory secretions*
  - Ewe cleaning a new-born lamb
  - Sheep housed in close confinement
  - From feeders and waters
- *Colostrum and milk containing infected cells*
  - Lambs nursing
  - Milking equipment
- *Less commonly*: in the womb, from semen, from blood-contaminated needles or equipment



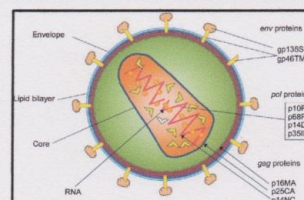
### How Does Maedi Visna Affect Productivity?

- Overall, *test positive ewes raise 4.95 fewer kilograms of lambs to weaning*
- They are less likely to get pregnant, their lambs are less likely to survive and those that do, weigh less at weaning
- Dairy ewes produce 7 to 12% less milk if seropositive



### Detecting Maedi Visna Infection

- Antibodies are detected in the blood stream 2 weeks to 6 months or longer after the sheep becomes infected
- There are many types of antibodies produced to different parts of the virus at different times after infection; blood tests vary by the antibodies they detect
- Blood samples drawn after 4 months of age, if positive determines that animal is infected and will remain so
  - Antibody levels in the blood vary depending on many factors
- Blood tests to detect virus (e.g. PCR) are less accurate because of low amount of virus in the bloodstream
  - Most virus-infected cells are in the tissues



Schematic of the various antigens in a maedi visna virus (Gómez-Lucia et al, 2017)

### What to Do if You Suspect Your Flock is Infected with Maedi Visna

- *Contact your flock veterinarian* to arrange testing of some suspect animals, at least ten depending on flock size and ideally animals that are relatively healthy and greater than 3 years of age
  - Severely debilitated animals may falsely test negative
- If you have one or more animals test positive, the risk of infection in the flock can be lowered by joining the **Ontario Maedi Visna Flock Status Program** administered by Ontario Sheep Farmers <https://www.ontariosheep.org/maedi-visna>



## PSBANS Sheep Breeder's Directory

PSBANS intends to publish a new issue of its popular Breeders' Directory in September 2020, for free distribution at our website [www.sheepnovascotia.ns.ca](http://www.sheepnovascotia.ns.ca), also the Facebook page Purebred Sheep Breeders of Nova Scotia (need a membership to access), by paper copy (a limited number), to anyone on my email list as a PDF, and on other relevant Facebook pages as a link to our website. It will be a small booklet, 8 ½"x 5 ¾", printed in black and white, with a white cover. The first section will feature Purebred Breeders, while the second section will be for commercial sheep producers and local sheep related businesses.

Please consider lending your support to this initiative through one or both of the following advertising options for your flock and/or sheep related business: **DEADLINE for advertising submissions: August 15th, 2020**

**1. Breeders' Listing:-** Free of Charge for PSBANS Members and members of CSBA in Atlantic Canada who are actively registering Purebred Stock with CLRC. (Price for non-members is \$20.00)

FLOCK OWNER:	PHONE(S):
FARM/FLOCK NAME:	E-MAIL:
CIVIC ADDRESS:	WEBSITE:
POSTAL ADDRESS:	PROVINCE & POSTAL CODE

WHAT DO YOU OFFER THAT IS RELATED TO SHEEP? Tick the box (s) ; **Specify breeds**, where applicable:

<u>Registered Purebred:</u>	<u>Commercial:</u>	<u>Freezer Lamb:</u>	<u>Woollen Products:</u>	<u>Working Dogs:</u>	<u>Other:</u>

### 2. Display Ad:

Cost:                      Selection: (check one)

1/3 page:	\$ 25.00	.....
½ page:	\$ 50.00	.....
full page:	\$100.00	..... Prices to include text, logo, picture.

- Note: - pictures should be of high quality: may be digital or print, suitable for scanning  
 ad items should be ready for publication (camera ready), JPG or PowerPoint format preferably.  
 - business cards can be submitted to provide logo, etc.  
 - text may include driving directions to your farm, however we will be creating a map for the center of the booklet identifying locations of all farms.  
 - Submit this form and if selected, additional advertising materials and payment for display ad to Cathy Vallis, PSBANS Secretary. Please contact Cathy if you have questions. Additional info may be submitted separately.

Cathy Vallis 4419 Riverside Rd Princeport, NS, B6L 1S3	Ph: (902) 895-4039 e-mail: c.vallis1981@icloud.com
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## Purebred Sheep Breeders' Association of Nova Scotia

### Interested in Becoming a Member??

Membership with PSBANS entitles you to:

1. Members of the Association Participating in the annual Atlantic Sheep Sale will receive a full refund of their registration fees if their animal sells. (Non-members registration fees will not be refunded, regardless if their animal sells.)
  2. Discount rates for participation in events sponsored by PSBANS
  3. Discounts for participation in promotional projects (i.e. a printed Breeders Directory, Fall Sale Catalogue, advertising on PSBANS website or a link to the website).
  4. Voting privilege at the PSBANS AGM for year of enrollment.
- Personal info to be used for administration purposes only or as described above.

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### **Membership Application:**

Name(s): \_\_\_\_\_

Mailing Address: \_\_\_\_\_

Postal Code: \_\_\_\_\_

Telephone: \_\_\_\_\_

Email: \_\_\_\_\_

Date: \_\_\_\_\_

Are you interested in having the PSBANS website link a URL to your personal Farm website?

YES \_\_\_\_\_ NO \_\_\_\_\_ Not Applicable \_\_\_\_\_

**Please make cheques payable to PSBANS:**

**PSBANS, c/o Cathy Vallis, Secretary, 4419 Riverside Rd, Princeport, NS, B6L 1S3**

**E-mail or Etransfer: [c.vallis1981@icloud.com](mailto:c.vallis1981@icloud.com)**