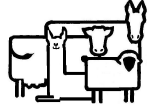


# Rideau-St. Lawrence Veterinary Services

A division of Leeds-Grenville Veterinary Professional Corp.

JB Billet DVM, JP Donovan DVM, HJ Ceelen DVM, AP Knoepfli DVM, CL Roth DVM

BR Keith DVM, BR Henderson DVM, PV Gamberg DVM, HL Aitken DVM



---

## Parasite Management in Pastured Sheep

Sheep are genetically designed grazers. As a species they survived in the wild by grazing the grasses and other plants in their area. In this environment they were regularly exposed to intestinal worms and thus developed an innate resistance to these parasites.

Through the introduction of agriculture we domesticated these animals and kept them in confinement. Those animals that did well and produced plentiful offspring were chosen as replacement animals. In early farming practices anthelmintics (deworming products) were not available. We were still able to keep these animals alive and producing what we were interested in (wool, lamb, milk).

With the development of deworming medications we found that we could raise more animals in a smaller area, we could also select for specific traits not related to resistance to internal parasites. As a result, slowly, we began to breed non-resistant animals and began to rely more heavily on drug use to maintain our production levels.

Parasites are survivors, and in some areas of the world (ie Europe, United Kingdom, Southern USA) parasites have developed resistance to all three families of deworming product. The result of this is the absolute inability to raise grazing animals on certain farms. While there has been anecdotal evidence of parasite resistance for a number of years recent studies conducted here in Ontario have proven resistance to certain products as well.

This resistance is not wide spread, and we are in a unique situation here in Eastern Ontario, that could allow us, as producers, to prevent the development of resistant parasites.

The genetics for parasite resistance are still present in sheep, and we are fortunate enough to have a species of animal that can reproduce fairly quickly. As a result we have the ability to genetically select animals that show a strong resistance to internal parasites.

Another opportunity that presents itself is the development of a pasture management program for individual farms, which could reduce or remove the need to deworm animals altogether.

Monitoring of worm numbers or production of individual animals could show us which animals are least resistant to these worms and allow us to select for stronger, better producing livestock.

Through design of individual farm plans and monitoring tools it is possible to slow the development of resistant parasites and/or reduce the reliance on anthelmintics altogether.

4 Industrial Road, Unit 4, Kemptville, ON K0G 1J0  
Phone: 613-258-2777 Fax: 613-258-0027  
[www.rideauvet.com](http://www.rideauvet.com)

# **Rideau-St. Lawrence Veterinary Services**

A division of Leeds-Grenville Veterinary Professional Corp.

Please contact us to design a system that works for your farm. It's not as complex as it sounds...

4 Industrial Road, Unit 4, Kemptville, ON K0G 1J0  
Phone: 613-258-2777 Fax: 613-258-0027  
[www.rideauvet.com](http://www.rideauvet.com)