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EXCELLENCE IN PRACTICE XLVets - We Excel



Invest in Health Don't Pay For Disease

XLVets member practices are dedicated to providing a high quality, cost effective service to their clients, to support long-term growth and future prosperity within the Irish livestock industry.

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conceived from within the veterinary profession. We are all independently owned, progressive veterinary practices located throughout Ireland committed to working

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Arklow Road, Gorey, Co.Wexford

04 New Developments in 12 Parasites in **Agriculture in Ireland**

Tadhg Murphy, Adare Vets

Horses:

Jack Roche, Comeragh Vets

07 Tips for Drying off Cows:

Hazell Mullins, Glasslyn Vets

09 Designing a Suckler Shed:

John Berkery, Mulcair Vets

14 Sheep flock health plans:

Nick Garvey, Old Church Vets



Training is a vital part of the jigsaw that makes up modern farm business success. But finding the training that's right for you needn't be a puzzle.

know now and what you'd like to know to improve your business.

put the farmer first; finding out what you open to everyone. Topics catered for include know now and what you'd like to know to cattle lameness, matitis and cell coutpalf improve your business.

XLVets Skillnet is funded by member companies and the Training Networks Programme, an initiative of Skillnets Ltd. funded from the National Training Fund through the Department of Education and Skills.

DISEASE MONITORING DISEASE MONITORING



Veterinary Surgeon Tadhg Murphy

XLVets Practice Adare Veterinary Clinic, Curraghbeg, Adare, Co. Limerick

In the past number of years there have been significant advances made in agriculture in this country including many herd health initiatives which are aimed at improving the health of the animal resulting in increased profitability at farm level.

XLVets Mentoring Programmes

XLVets have created a suite of herd health mentoring programs. Each program includes a diagnostic aspect at the beginning to identify relevant risks at farm level. Then each assessment is followed up with a plan that is designed to improve the health status of the herd. The plan includes a number of routine interventions and meetings both in group format and one-to-one between the vet and the farmer. The role of the vet is to determine the appropriate course of action with the farmer and monitor the implementation of the agreed plan.

DairyMentor programme and SucklerMentor programme

These are detailed disease monitoring programmes which, through a combination of milk, blood and faecal samples, provide a comprehensive profile of individual diseases such as BVD. Johne's disease. Mycoplasma Bovis, Salmonellosis, Neospora, Rumen

TADHG MURPHY MVB

In this article we will explore the various disease monitoring programmes available to farmers, resulting in increased profitability and improved animal health.



New developments in **Agriculture** aimed at improved animal health



Fluke, Liver Fluke, Mastitis, IBR, RSV, Leptospirosis, Liver Fluke, Stomach Worms and Schmallenberg Disease.

XLVet PneumoMentor

Here pneumonia outbreaks can be investigated by testing 5 animals from a group for diseases such as IBR, RSV, PI3, BVD and Mycoplasma.

XLVet MastiMentor

Whether trying to decide on appropriate dry cow therapy or when dealing with mastitis problems this programme is useful in identifying the specific bacteria causing milk quality problems on your farm. Both bulk milk and individual samples are tested.

XLVet FaecoMentor

This pooled faecal sample checks for Liver Fluke, Rumen Fluke and Stomach Worms.

Animal Health Ireland Programmes

AHI was set up in 2009 and functions as a partnership between private sector organisations and businesses in the agri-food sector, such as milk and meat processors, and the Department of Agriculture, Food and the Marine. Its mission is to contribute to a profitable and sustainable farming and agri-food sector through improved animal health. The advice provided by AHI is developed by a number of technical working groups. The programmes currently being run by A.H.I. include

WORKING TOGETHER FOR A HEALTHIER FUTURE...

STAKEHOLDERS

GOVERNMENT

Department of Agriculture, Food and the Marine

PROCESSING AND MARKETING

Arrabawn Co-op **Bord Bia**

Carbery Group Connacht Gold

Dairygold **Dawn Meats**

Glanbia

Kepak Group

for Irish farmers, advisors and vets

A Guide to Johne's Disease

BVD - National Eradication Programme

At this stage everyone is familiar with the BVD eradication programme which has been underway since 2012. Prior to the eradication programme it is estimated that BVD was costing Irish farmers approximately €104m per year. However, since the inception of the programme, the national level has fallen from 0.77% in 2013 to 0.18% in 2016 with the percentage of positive herds falling from 11.27% to 2.92% in the same period.

CellCheck - National Mastitis Control Programme

Mastitis can significantly reduce farm profitability through:

- Clinical cases of mastitis resulting in increased veterinary costs, reduced production and increased culling rates.
- Subclinical mastitis (High somatic cell counts) resulting in reduced production, increased culling rates and a reduction in the milk price received from the

CellCheck has attempted to improve this situation by:

- Providing Farm Guidelines for Mastitis
- · The development of service provider
- Running farmer workshops

A.H.I regularly produce bulletins and tips to promote better milking practices all of which are available to view on the A.H.I.

Johne's Disease Herd Pilot **Programme**

The objectives of this programme are:

- **Bioexclusion** To identify those herds that test negative for Johne's disease and provide farmers with the knowledge and professional support to allow them to increase their confidence of being free of infection over time and to protect their herds from the on-going risk of introduction of this disease.
- **Biocontainment** To provide herds identified by the programme with the knowledge and professional support to allow them to control and reduce the disease over time and ultimately achieve a high confidence of disease freedom.
- To further underpin the quality of Irish dairy and beef produce in the international marketplace.

The principal components of the programme are:

- Programme enrolment
- The provision by an approved veterinary practitioner of on-farm risk assessment and disease management advice
- Herd screening (using milk or blood samples)
- Testing of samples in designated laboratories
- Transfer of test results to a centralised database provided by ICBF
- Limitation on the sale of Johnes Disease positive animals.

Guidelines of the programme and general information on the disease are available on the A.H.I. website www.animalhealthireland.ie

BEEF HealthCheck

The objectives of this programme are twofold:

- To develop tools to assist farmers and their veterinary practitioners to control losses due to liver fluke and pneumonia through capture, analysis and reporting of abattoir data.
- To contribute to the development by ICBF of economic breeding indexes that incorporate health and disease data.

CalfCare

The key objectives of this programme

- Develop and disseminate technical material on the quality and usage of calf
- Continue to deliver farmer information events on all aspects of calf rearing from birth to weaning.
- Engage with Teagasc, vets and other advisers through in-service training and other means to ensure consistency of

Biosecurity

Information leaflets have been produced on:

- Understanding infectious diseases
- Purchasing Stock: reducing disease risks
- Bioexclusion: keeping infectious disease out of your herd
- Biocontainment: preventing disease spread within your farm

DISEASE MONITORING DRYING OFF COWS

A.H.I.'s objectives also include:

- Producing biosecurity guidelines on
- (1) High risk farm visitors(2) Leasing of dairy cows(3) Vaccine handling and usage
- Contributing to the development of the biosecurity-related elements of the Rural Development Plan
- Developing a simple-to-use on-farm biosecurity audit tool.

Parasite Control

A three-pronged approach is recommended by A.H.I.'s Parasite Control Technical Working Group to tackle parasites on Irish farms.

- Monitoring
- Testing
- Strategic Treatment

This approach is a move away from the older 'continual and repeated blanket treatment' approach previously endorsed on farm. It aims to combine good grazing practices with effective testing to achieve the best results on farm. It is designed to be a more sustainable approach, by minimising Anthelmintic Resistance and minimise treatments on farm.

Reducing parasite burdens on farm will increase productivity and result in increased profitability.

Factsheets which have been produced to date include topics such as Liverfluke, Rumenfluke, Lungworms, Redwater,

Gutworms, Cryptosporidiosis, Coccidiosis as well as guides to parasite control.

I.B.F

A.H.I are currently in consultation with stakeholders with a view to developing a national eradication plan.

All of these factsheets as well as information of all the above diseases can be found on the A.H.I website

www.animal health ireland.ie

Other initiatives currently ongoing in this country include:

Knowledge Transfer Scheme

This scheme which is receiving significant funding (€100m) from the National Exchequer and the European Agriculture Fund is an improvement from the previous discussion group model and is being implemented across 6 sectors - Beef, Dairy, Sheep, Tillage, Equine and Poultry.

This scheme is designed to ensure the farmer and advisor engage in one to one discussions on all the key aspects of the farmer's business. This one to one engagement will be complemented by group based discussion and the sharing of experience and information between farmers.

The programme will run for 3 years and facilitated by qualified facilitators.

KT Groups have between 12 and 18 members and require attendance at 5 Group Discussion meetings and the creation

a Farm Improvement Plan (FIP).

Members of XLVets are knowledge transfer approved trainers and available to attend your group meeting.

Beef Data and Genomic Scheme

The Beef Data and Genomics Programme (BDGP) is an agricultural scheme launched by the Department of Agriculture in May 2015. It is worth €52m per annum to Irish farmers.

The scheme, which will run until 2020, is designed to:

- Improve the genetic merit of suckler herds and
- Reduce greenhouse gas emissions from Irish beef herds

Under the scheme, which was approved by the European Commission, eligible farmers will receive funding to carry out this work.

Conclusion

2016 has been a challenging year for agriculture particularly in the dairy sector and farmers are having to keep a tight control on all overheads to stay afloat.

However, animal health is the cornerstone of profitability and the programmes being run by XLVets and A.H.I are geared towards minimising disease levels on farms and the herd health information provided by A.H.I. is easily accessible on their website and for the most part free while farmers actually receive payment for participating in the Knowledge Transfer Scheme and the Beef Genomic Scheme.





Veterinary Surgeon Hazell Mullins

XLVets Practice Glasslyn Vets, Bandon Co. Cork

To prepare cows for your "drying off date"

- Dry off cows once their production reaches 9L or less
- Stop milking cows producing 12L or less at your "drying off date"
- One week prior: reduce ration feeding to less than 2kg per day
 Three days prior: stop ration feeding
- completely, if outside move to sparse pasture
- Continue a basic maintenance only diet for 3-4 days after drying off
- Make sure ad lib water is available at all times
- Dry off abruptly- do not skip any milking
- Milk out each quarter fully at last milking

Post drying off

- Do not leave cows in roadways or yards after drying off in the 2 hours post drying
- Put cows in a dry clean paddock no bare ground for 3-4 days after drying off
- If housed straight after ensure cubicles are clean and dry and away from the milking parlour to prevent inappropriate milk let down
- Check for any swollen quarters daily to identify any new infections
- If new infections are discovered treat as a clinical case - seek veterinary advice if necessary
- Retreat affected quarter with dry cow therapy once a clinical cure is observed and amend date for the withholding period

VOLUME 4 EDITION 6

HAZELL MULLINS MVB

With drying off season approaching we give tips on what to look out for.



Tips for Drying off Cows



Dry Period Stages

Ideal length of dry period should be at least 60 days

- Involution Begins once daily milking has ceased, milk secretions begin to dry up, the lining of the udder starts to involute, the teat canal becomes plugged with keratin and this plug can take up to two weeks to seal completely
- Steady State The udder has no active secretions, the length of this period depends on the total length of the dry period, this is a vital stage for recovery of the udder, and increased milk production in the subsequent lactation and the length of this stage coincide
- Colostrum production This marks the start of lactation, udder enlarges and begins to secrete milk, this begins 2 weeks prior to calving. The volume dramatically increases 1-3 days before calving referred to commonly as "Springing or Bagging up"

High risk stages for mastitis

- Involution (2-3 weeks post drying off)
- Colostrum production 2 weeks prior to calving

How to Admin sealants/ Antibiotic Dry Cow Therapy

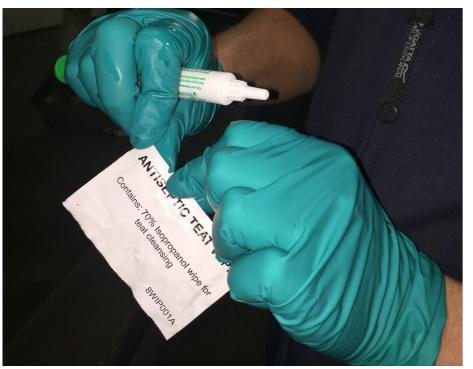
You will need:

- Disposable Gloves
- Cotton wool and surgical sprit
- Plenty of time on your hands
- Remedies book

Anti-biotic tubes

- 1 Keep the cows to dry off until the end of milking
- 2 Wear clean gloves
- 3 Strip out all four quarters
- 4 Pre-dip all teats and allow 30 seconds contact time and dry with clean paper towel
- 5 Start with the front teats
- 6 Scrub the teat with cotton wool and surgical spirit, until no dirt is visible on cotton wool
- 7 Infuse the whole antibiotic therapy and massage up the teat, repeat x 4.
- 8 Immediately following treatment- dip all teats

DRYING OFF COWS SUCKLER SHED DESIGN



Sealers

- 1 Starting with teat closest to you-repeat cleaning procedure (very important to avoid introducing dirt into the teat canal)
- 2 Pinch the teat at the base of the udder
- 3 Keeping it pinched infuse the sealant into the base of the teat- Do not massage upwards
- 4 Repeat on all teats
- 5 Post dip all four teats
- 6 Allows cows to stand for 30 minutes

Positives of sealers

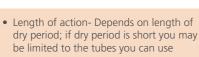
- Seals out new infection
- Reinforces the cows natural keratin plug
- Research has proven that it reduces mastitis in the dry period and subsequently reduces mastitis in the first 100 days post calving
- Can be used as part of a selective dry cow therapy protocol – no withdrawals

Negatives of sealers

- Hygiene needs to be paramount
- If hygiene is not of gold standard new infections can be locked into the udder
- Need to strip at least 10-12 times after

Which Antibiotic?

- Each farm will have a tube that fits the profile of their mastitis best
- Antibiotic Resistance is an issue on certain farms and can change from year to year

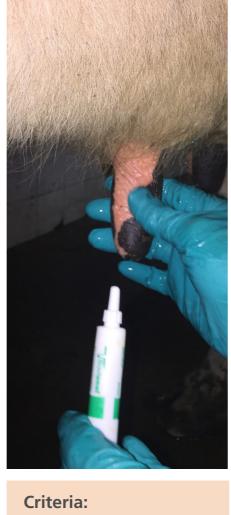


• Type of infections- Culture and sensitivity testing of a selection of cows can tell you the bacteria you need to target and the antibiotics with the least resistance

• On select farms that do consistent milk recording the use of sealers alone could be a viable option - Selective Dry Cow

Selective V's Blanket Dry **Cow Therapy**

- Blanket dry cow therapy means treating all cows with an antibiotic +/-
- **Selective therapy -** only certain more problematic cows get treated with antibiotic – not recommended for every herd, more cost effective and also better for reducing antibiotic resistance in your



- Overall low Herd SCC <200000
- Individual low SCC At least three results under threshold SCC level (thresholds are formulated based on farms SCC current and past history)
- Good clinical mastitis records

WORKING TOGETHER FOR A HEALTHIER FUTURE...

- CMT results- positive results only occurs at a SCC of >400000- need individual SCC to determine subclinical infection
- Always consult first with your vet for advice on selective dry cow therapy





Veterinary Surgeon John Berkery

XLVets Practice Mulcair Vet Clinic, Newport, Tipperary & Cappamore, Co. Limerick



When designing any shed it is worth bearing in mind will be required of this shed, now and into the future? In particular, what are the requirements of the cattle to be housed?



Designing a Suckler Shed

Will this shed provide an optimal environment to ensure the health, welfare and productivity of these animals? Will this shed ensure maximum efficiency of labour and inputs (feed and bedding)? Will this shed be a safe workplace for you, your staff and people doing work on your farm (Vets, AI men etc.)?



Mono pitch sheds are now a popular design

Location

One of the first decisions is the location of your shed. Things to consider include local weather, prevailing winds and exposure. Any feeding barrier should never face into the prevailing wind. The relationship with other buildings nearby may create wind tunnel effects. Other factors influencing where to locate your shed include the proximity of other livestock (biosecurity and disease risks), storage facilities for feed, bedding and waste materials and access to cattle handling facilities.

There are several options for a suckler shed. One of the more common designs for new sheds encompasses a slatted area with feeding barriers for the cows and an adjoining lie-back suitable for use as calf

creeps or calving boxes. Having the cows on slats over a tank eliminates a lot of labour. Rubber mats can be placed over the slats to improve cow comfort and performance. Another option is a cubicle house with a separate creep area for the calves. Loose straw bedded houses are mainly used by organic farmers. Alternatively some people use a loose house with a slatted feeding area. Each design has various advantages and disadvantages.

The ideal shed should have pens to allow the easy separation and segregation of cows. The number of cows that will need to be housed will ultimately dictate the size of the shed while the available site and budget considerations will also have an influence.

A suckler cow in a slatted shed will require at least 3m² per cow (depending on breed/ size of cow) and an extra 1m-2m² per suckler calf. With this in mind you can calculate the length, width and height to

A well designed shed will control three key environmental parameters: Air speed, Moisture and Fresh air. Air movement is essential to bring fresh air into the building and remove moisture, heat and gases, although too much air movement can cause draughts at animal height which should be avoided particularly for calves. Therefore air speed within a building is critically linked to animal health and welfare.

Moisture is produced by all livestock in their breath, urine, faeces and sweat. Excess moisture increases the risk of infections and the requirement for bedding and reduces the ambient temperature. It is therefore

SUCKLER SHED DESIGN SUCKLER SHED DESIGN

imperative that good drainage and manure management prevents the build up of moisture.

Fresh air is a primary requirement for maximising health and productivity. Fresh air facilitates the removal of heat, moisture, dust, gases and pathogens from the building. A well designed shed will deliver clean, fresh air to every part of the shed without exposing animals to draughts.

Clean air must be able to flow in and out of a building at all times, taking with it bacteria and viruses that are inevitably present in the environment. A lack of fresh air in a shed is indicated by the stale smell of ammonia, which is formed by the mixing of urine and faeces. This distictive smell along with excess moisture will elevate the risk of disease.

Ventilation Requirements

It is important at this stage to remember that having the optimal inlet and outlet areas to optimise ventilation are more important than the height and volume of the building. It is critical to get these right to prevent diseases such as pneumonia.

An ideal shed design will maximise ventilation on a still day without exposing the livestock to draughts when the wind is blowing. This is possible for many, but not all buildings, and usually relies on ventilation via the stack effect. The stack

effect involves the heat generated by the livestock in the building warming the air which rises and leaves through the outlets in the roof, to be replaced by fresh air coming in at a lower level through the inlets in the wall.

When designing a new building one of the most important things to calculate is the area of outlet required in a roof to allow heat and moisture from the livestock to escape by natural convection. As a rough estimation, there should be an outlet area of 0.04m² per animal up to 100kg liveweight, rising to 0.1m² for fast-growing and adult animals. In a badly designed building with an insufficient ridge outlet, there will be high humidity and condensation within the shed

The inlet area required in the side walls can be set once the outlet area has been calculated. The inlet area, which ideally would be split evenly across the two sidewalls, is an absolute minimum of twice the outlet area, and better at four times the calculated outlet area. To avoid drafts at calf level, side walls should be solid to animal height with the required air inlets between these solid walls and the roof.

depends on the area between this wall and the eaves, and the degree of exposure to weather. A small available area of sidewall will need a larger number of openings compared with a large area of sidewall, to achieve the same inlet area. Vented sheeting which is very popular in many Irish suckler sheds can have a void (gap to let air through) of less than 6%, which often

The choice of material above the solid wall

provides insufficient inlets for fresh air to enter the shed. Conversely if the void in the sidewall material is too large, animals in the shed can become exposed to excessive air speeds which can cause reduced feed conversion, potential immunosuppression and severe disease.

The angle of the slope or pitch of the roof is important as a higher pitched roof will ventilate more efficiently than a lower pitched roof. The optimal material for roof cladding should provide enough insulation to produce a stable internal temperature, reduce the rate of condensation and reduce the amount of moisture dripping onto bedding.

For lean-to sheds there are certain considerations that should be met to ensure that clean air can flow into and out of the building at all times taking with it bacteria and viruses that are inevitably present in the environment. There should never be a distance greater than 9 metres from the back wall to the feed barrier at the front of a lean-to shed. If the building needs to be larger than this then a pitched roof is required to ensure adequate ventilation.

There should be a minimum height of 3.5 metres from floor to the lowest point of the roof. The roof should have a minimum 15° pitch. Below this pitch airflow is poor at most wind directions. A steep pitched roof over 22° will facilitate the ideal airflow pattern. A lean-to shed should face the sun, so that sun can enter the pens, ideally with the back against the prevailing wind. The floor should slope from back to front with a drain outside the pens.



Vented sheeting can be considered for inlets in certain situations.



Space board is one option for air inlet

Feeding

Labour and time are valuable resources on suckler farms so careful consideration of the logistics of daily feeding routines at the design stage can significantly improve the productivity and profitabilty of the shed. The objectives are to keep clean feed in front of the cattle and within reach. Tractor access ensures the minimum amount of labour is required to push feed up and clean old feed out. Animals should be protected from wind and weather at a feeding barrier to prevent negative impacts on intake, health and performance.

An open horizontal barrier increases the risk of bullying by dominant cows. Diagonal barriers reduce the risk of bullying, as do self locking barriers which also have the advantage of preventing calves escaping. However, a large number of feeding barriers are designed poorly and are not comfortable for the cows to feed at. Consequently animals will tend to move away as soon as possible and therefore have a reduced intake. They will also tend to pull back their head when chewing rather than remain in an uncomfortable position and thus pull in a lot of silage which is often wasted. Well designed and properly adjusted feeding barriers will therefore reduce silage losses and increase feed intake and productivity.

Clean drinking water must be available at all times in any good shed. Water drinkers, bowls or troughs should be easily cleanable and should be placed over areas that drain effectively to prevent damp bedding and floors which can increase humidity and the risk of disease. The location and number of drinkers must not restrict the less dominant cattle in the shed from drinking.

The recommended space per calf in the bedded creep area is 1-2m². The creep area for calves should be fully accessible by a tractor, usually via sliding doors for cleaning out and for bringing in bales of straw. All dividers in the creep should be hinged to facilitate easy cleaning out. It is important that all internal divisions in the creep area provide full protection against draughts at calf height. This can be achieved by securing plywood sheets or election posters to barriers and gates.

The surface material of the creep area is very important and should ensure that the pens can be easily cleaned and sanitised. The creep area should be well sloped down to the tank to facilitate drainage. Calves under four weeks old need an ambient temperature of at least 20°C for optimal health and growth rates. To keep them warm they should always be well bedded in clean dry straw to enable them to nest. In very cold weather calf jackets can to used. Alternatively a canopy made of plywood could be attached to the wall in the creep area. This can create a warm micro environment when calves lie together underneath it. This canopy should hinged to allow it be folded up against the wall to enable tractor access for easy cleaning out of creep area.

Emphasis should be placed on proper animal handling facilities. Good gates and doors on the shed will decrease the risk of accidents and prevent animals escaping. It is well worth ensuring that animals in the shed can easily be directed into a secure crush with a good headgate for management tasks, and then back again into their pens. If this crush is not inside the shed, it would preferably be protected

from inclement weather, perhaps by an overhanging roof.

Calving area

Any calving pen should contain a well designed calving gate which should facilitate funnelling the calving cow into a properly secured, quick releasing headgate. This gate can be latched to create a working chute, but must contain a centre gate that can be swung away from the cow to allow access for caesarian sections.

It is also very important that the entire calving gate can be completely swung away in case the animal goes down. The surface of the calving pen should be rough enough to prevent cows from slipping but also suitable for easy cleaning and disinfection. The pen should be at least large enough to give the cow enough space to calve in comfort and to enable you to use a calving jack without hindrance.

Act in haste, repent at leisure, as the old proverb says. When you are planning on building a suckler shed it is well worth investing time and effort to find the optimal design for your own situation. This should include visiting sheds on other farms and getting feedback and recommendations.

Building design decisions are frequently influenced by cost considerations. However, long-term investment in a structure that will optimise animal health and performance should take priority over any short-term cost savings.



Controlling worms involves

XLVets Practice Comeragh Veterinary, Kilmacthomas, Co. Waterford.

1 Effective pasture management

three approaches:

- 2 Identifying and monitoring horses with a significant worm burden
- 3 Using effective anthelmintic (wormer)

Pasture management

Removing droppings from pasture at least once every two weeks will help decrease the level of worms. Use adequate grazing densities as overcrowding promotes grazing roughs where horses do their droppings.

Identifying and monitoring horses with significant worm burden.

Worm egg count (WEC) is the basis for identifying these horses. Fresh droppings should be collected in airtight bags, kept cool and delivered the same day to the vet practice.

Horses with low or zero WEC should be tested every 4 months. Horses with significant WEC should be treated and re tested in 2-3 months. Horses with high burdens (more than 1000 eggs per gram) should be tested again following treatment to check for resistance.

JACK ROCHE, MVB

In this article we consider some of the implications of various parasite control strategies and look at some of the treatment options available.



Parasites in horses. When and what to use

Anthelmintic or wormer resistance is an increasing problem which we ignore at our peril. The days of blanket internal worming are over. Below is a worm control guide to help horse owners plan their worming regime, please discuss the programme and its relevance to your situation with your veterinary surgeon.



Tapeworm

Worm egg counts are not reliable for Tapeworm. ELISA blood test in spring and treat as required. Treat once or twice yearly (Spring and Autumn) depending on blood results.

Chemical Treatments (Anthelmintics)

Horses with high worm egg counts – use Ivermectin or Praziquantel. Moxidectin is

highly effective and should be reserved for annual encysted small Redworm (cyathostomes), new horses and those with resistance to other wormers.

Beware of:

- Under dosing due to poor weight estimation
- Under dosing due to horse spitting out wormer
- Resistance in worm population

Worm Control Programme

Pasture management

Collect droppings at least once per fortnight.

March/April ELISA blood test for Tapeworm

- Negative / low result treat in Sept/Oct (see below)
- Positive / high result treat immediately with Praziquental or Pyrantel

March/April Worm Egg Count

- Low result test again in 3 months
- High result treat with Ivermectin or Moxidectin, retest after 8 weeks

July Worm Egg Count

- Low result test again in 3 months
- High result treat with Ivermectin or Moxidectin, retest after 8 weeks.

September / October

Treat for Tapeworm and Redworm larvae (Moxidectin and Praziquantel).

New horses

Treat with Moxidectin and Praziquantel on arrival

After treatment

Horses should be kept stabled for 48 hours to allow eggs to be evacuated

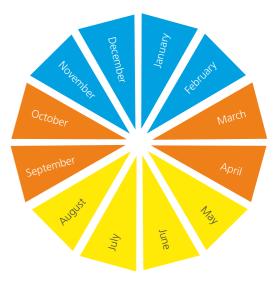
Pasture rotation should not take place within 2 weeks after treatment



Treat for Bots with Ivermectin

Treat for Tapeworm using Pyrantel or Praziquantel

Target Roundworm, Redworm using Ivermectin



Anthelmintic	Foals	Pregnant Mares	Lactating Mares
Fenbendazole	Yes - any age	Yes	Yes
Pyrantel	> 4 weeks	Yes	Yes
Ivermectin	> 0-8 weeks		
	(* products vary)	Yes *	Yes *
Moxidectin	> 4 months	Yes	Yes
Praziquantel	> 2 months	Yes	Yes
Ivermectin/Praziquantel	> 2 weeks to 2 months	Yes *	Yes *
Moxidectin/Praziquantel	> 6.5 months	Yes	Yes



FLOCK HEALTH PLAN FLOCK HEALTH PLAN



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Different sheep enterprises will have different realistic targets depending on the resources available and the potential improvements which might be desired. These are heavily influenced by land type, availability of labour, alternative off farm income, time constraints and farming systems.

For instance, 2.0 lambs/ewe might be an optimum target for a low land system with good fodder, housing and adequate labour availability; conversely this may cause enormous problems in an alternative system where 1 lamb per ewe would be optimal. This is a target which is useful to set in conjunction with your veterinary surgeon around a flock health plan.

The number of lambs produced and reared will influence a farms profitability, but this should not coincide with a disproportionate increase in costs. Increasing lamb production from a flock requires more labour and increased skill levels to achieve the best outcomes. It requires better grassland management to avoid increased concentrate use for example. In reality concentrates cost four times that of grass thus potentially eliminating any gains from increased numbers.

Measuring targets requires records. Good record keeping is challenging, especially during a hectic busy lambing season. A farms strengths and weaknesses can be highlighted and identified with good records. Lamb mortality rates at different risk periods such as late pregnancy, at

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"A goal properly set is halfway reached", the problem often is that we set no goal at all. Setting targets gives purpose to your efforts, and a way to measure progress. The performance of the national sheep flock has remained low, but relatively stable, over recent years.



Sheep Targets



lambing and before turn out etc can be monitored and problems identified.

Opportunities then become available for improvements. For example in flocks where lambing and scanning rates differ by more than 2% an underlying abortion agent may be responsible. Identifying and resolving these problems are easy wins and give a good return on investment against vaccination costs.

Lamb growth rates and finishing times often provide an opportunity for improvement. Earlier finishing usually allows lambs to achieve a higher price in a falling summer market, and increases available grass for fodder or flushing ewes later in the Autumn.

Inadequate parasite or worm control, prevalent infectious diseases, and lameness delay lamb growth rates and increase the cost of production. In the first 8 weeks for example, low land lambs should achieve at

least 250g/day DLWG, lower growth rates should be investigated with your vet.

Consideration would be given to problems such as parasites, milk production by the ewe and the nutritional and mineral status of the flock.

Often in discussions the best motivator of all is gross profit per hectare. Money in your pocket is ultimately what it's about. In 2015 there was over a five fold difference in gross margin per hectare between the bottom and top sheep farms! Because of higher weaning and stocking rates, output on the top farms is more than double the output of the bottom farms and total direct costs are lower despite the significantly larger output!

It is relatively easy to benchmark your farm, and which category it most accurately fits into in Table 1. These figures exclude all single farm payments monies. To look on it optimistically, those in the middle and bottom thirds have the most to gain!

Table 1

	Тор	Middle	Bottom
Stocking Rate (ewes per hectare)	8.36	7.13	6.62
Weaning Rate (lambs per ewe)	1.44	1.26	1.14
Gross Output (€/hectare)	1319	914	672
Cencentrates (€/hectare)	148	158	268
Pasture and Forage (€/hectare)	146	140	126
Other Direct Costs (€/hectare)	113	102	117
Total Direct Costs (€/hectare)	407	400	510
Gross Margin (€/hectare)	912	515	162

Ewe fertility is the first key step to increasing lamb numbers. Ruthless culling pre mating is vital to maintain profitability. A ewe which is unlikely to rear lambs next year should be culled. The top reasons for culling are identified in Table 2. Culling eliminates problems before they occur (again).

Table 2: Main culling reasons

Body condition	Thin ewes: ewes remaining thin 1 month post weaning. Fat ewes: confirm that these ewes produced lambs last year.
Udders:	Mastitis or lumpy udders won't produce enough milk. Large teats, saggy udders are difficult for baby lambs to locate.
Teeth:	Broken mouth ewes are difficult to maintain body condition.
Feet:	Treat and cull repeat offenders (more than 2 breakdowns)
Lambing problems:	Ringwombs, prolapse vaginas and abortions (unless diagnosed)

Flock fertility needs both fertile ewes and rams. A veterinary ram breeding soundness exam, or fertility test, is useful in identifying infertile or subfertile rams. At the very least this should be performed on all purchased rams 1 month before breeding. Sub-fertile rams have a dramatic impact on reducing lamb numbers and prolonging the lambing period. Future developments including genetically evaluated rams will become increasingly important in the selection of certain traits such as the resistance to internal parasites.

The data in the table below forms the basis for a flock health plan. It is an annual review process, as the farming system evolves and changes new pressure points develop and previous problems become resolved.

Your veterinary surgeon can have an important role in developing your own personalised tailored flock health plan. The plan should be user friendly, active and of real benefit to the farmer, not just sit on the shelf waiting for the quality assurance or department audit. Implemented properly it also facilitates the general principle that medicines should be used as little as possible but as much as necessary. The plan sets out optimal achievable and agreed targets between farmer and his vet. This approach allows incremental gains to be achieved and the properly set goal to be realised.

Farmer Flock Data Recording Table

No. of ewes put to ram No. of rams No. of ewe deaths Ewe lambs reared Ewe lambs purchased Lamb data No. lambs scanned No. lambs stillborn No. lambs born alive No. lambs at turnout No. lambs weaned No. lambs sold Age lambs sold/finished	KPI	Your Data
No. of ewe deaths Ewe lambs reared Ewe lambs purchased Lamb data No. lambs scanned No. lambs stillborn No. lambs born alive No. lambs at turnout No. lambs weaned No. lambs sold	No. of ewes put to ram	
Ewe lambs reared Ewe lambs purchased Lamb data No. lambs scanned No. lambs stillborn No. lambs born alive No. lambs at turnout No. lambs weaned No. lambs sold	No. of rams	
Ewe lambs purchased Lamb data No. lambs scanned No. lambs stillborn No. lambs born alive No. lambs at turnout No. lambs weaned No. lambs sold	No. of ewe deaths	
No. lambs scanned No. lambs stillborn No. lambs born alive No. lambs at turnout No. lambs weaned No. lambs sold	Ewe lambs reared	
No. lambs scanned No. lambs stillborn No. lambs born alive No. lambs at turnout No. lambs weaned No. lambs sold	Ewe lambs purchased	
No. lambs stillborn No. lambs born alive No. lambs at turnout No. lambs weaned No. lambs sold	Lamb data	
No. lambs born alive No. lambs at turnout No. lambs weaned No. lambs sold	No. lambs scanned	
No. lambs at turnout No. lambs weaned No. lambs sold	No. lambs stillborn	
No. lambs weaned No. lambs sold	No. lambs born alive	
No. lambs sold	No. lambs at turnout	
	No. lambs weaned	
Age lambs sold/finished	No. lambs sold	
	Age lambs sold/finished	
Sale/slaughter weight	Sale/slaughter weight	
Sale/slaughter value euro/head	Sale/slaughter value euro/head	

Flock Size	% of Flocks	% of Lamb Produced
20-50	35	35
50-100	29	26
100-150	18	20
>150	17	19

KPI	National average
Lambs/ewe	1.25 lambs/ewe mated
KG carcass produced/hectacre (lowland)	170 kg/ha
Stocking rate	7.5 ewes/ha
Concentrates fed	50 kg/ewe
Gross margin	500 euro/ha (excluding subsidies)

LIVESTOCK MATTERS

XLVets was recognised by the Irish Institute of Training and Development as Ireland's best learning and development network in 2016. The award was made in recognition of XLVets achievements in delivering highly effective training to farmers since 2010.



Members of XLVets are knowledge transfer approved trainers and available to attend your group meeting. To book a trainer, please contact your nearest XLVets practice; details below.

Practice Name	Address	Contact No.
Adare Veterinary Clinic	Curraghbeg, Adare, Co Limerick	061 396390
All Creatures Veterinary Clinic,	Lanesboro Street, Roscommon Town, Co Roscommon	090 6626898
Avondale Veterinary Clinic	Ferrybank, Arklow, Co Wicklow	040 233744
Castle Veterinary	Church Street, Castleisland, Co Kerry	066 714 1230
Clerkin Vets	90 Bridge Street, Cootehill, Co Cavan	049 5552777
Comeragh Veterinary	Main Street, Kilmacthomas, Co Waterford	051 294143
Donal Lynch MVB	Killurin, Tullamore, Co Offaly	057 9354505
Geraghty and Neary Veterinary	College Road, Mountbellew, Co Galway	090 9679277
Glasslyn Veterinary Clinic	Station Road, Bandon, Co Cork	021 4772277
Glen Veterinary Clinic	Blind Street, Tipperary Town, Co Tipperary	062 52992
Glenbower Veterinary Group	Clashdermot East, Killeagh, Co Cork	024 95189
Glenina Veterinary Clinic	1a Glenina Heights, Dublin Road, Co Galway	091 752014
Gortlandroe Veterinary Clinic	St. Conlon's Road, Nenagh, Co Tipperary	067 31016
Kilcoyne Veterinary	Mountain Road, Tubberycurry, Co Sligo	071 9185016
Killenaule Vets	Killenaule, Thurles, Co Tipperary	052 9156065
Longford Animal Health Centre	Cooleeney, Shroid, Longford, Co Longford	043 3346716
Mulcair Veterinary Clinic	Dromsally, Cappamore, Co Limerick	061 381209
O'Connor & Julian Cashel Vets	Cahir Road, Cashel, Co Tipperary	062 61196
Old Church Veterinary Hospital	The Mall, Ballyshannon, Co Donegal	071 9851559
Ormonde Veterinary	14 Barrack Street, Kilkenny, Co Kilkenny	056 7764724
Riverview Veterinary Group	Distillery Road, Bandon, Co Cork	023 8841503
Sliabh Luachra Veterinary Centre	West End, Rathmore, Co Kerry	064 7758009
Southview Veterinary	Irishtown, Clonmel, Co Tipperary	052 6121429
Veterinary Hospital	Arklow Road, Gorey, Co Wexford	053 9421151