



PRIORS FARM  
EQUINE VETERINARY EXCELLENCE

# newsletter

## SPRING 2011

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### What's New At Priors Farm

In-order to provide you with the very best service we have been investing in some new equipment. We have recently acquired a new battery-operated reproduction scanner that allows us to scan your mare at the stable even if you do not have any electricity. We are looking to purchase a new x-ray machine that will enable us to take x-rays at your yard and please don't forget our new weigh-bridge at Priors Farm (you can use it free-of-charge!).

The barn at Priors Farm is perfect for giving you and your horse shelter if you would like to clip them or if they need the farrier. This Barn can be used at any-time during office hours and has the advantage that we are on hand if your horse needs sedation.

As a Tier 3 Hospital you can be assured that we can give your horse the very best care and this year we performed more surgeries than ever before: up on last year by almost 100%. We all hope that we can continue to offer you and your horse the highest quality, caring and compassionate service available.

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### New Staff At Priors Farm

We are delighted to announce the return of Jessie Horne as a new nursing assistant. Jessie worked at Priors Farm during the summer months of 2008 and 2009 and is returning to us full-time. Jessie is enthusiastic and always has a ready smile to welcome you and you can be assured your horse will be in the very best of hands.

## Ragwort

Ragwort, also known as *Senecio jacobea*, is a distinctive yellow flowering plant that thrives on wastelands and poor quality pastures. It contains a toxin of a class called pyrrolizidine alkaloids that are hepatotoxic (damage the liver). Ragwort has a bitter taste and most horses will avoid eating it provided there is an alternative source of food, unfortunately when ragwort is cut and wilted it loses its bitter taste but the toxic compounds remain intact. Ingestion of these toxins over time has a cumulative effect causing progressive liver failure.

The liver may be considered as the processing centre of the horse, receiving various chemical components directly from the intestines and converting them into other substances that the body can utilize. One of the other major tasks performed by the liver is the processing of various toxins, either ingested or produced by the horse's body. The microscopic structures at the heart of liver function are the hepatocytes; a highly specialized type of cell. The pyrrolizidine alkaloids attack these cells causing them to die off and instead of being regenerated they are replaced by fibrous tissue meaning that, over time, the liver shrinks in size. The liver has a large functional reserve and it typically takes 80% of the organ to become damaged before any signs can be observed.

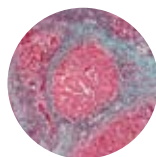
Signs of ragwort poisoning tend to be similar to other diseases that affect the liver. Often bizarre or depressed behaviour is observed as a result of toxic substances building up in the blood stream that the liver is unable to process thereby affecting the brain. Another common clinical sign is inflammation of white, un-pigmented areas of skin that have been exposed to sunlight. This is commonly known as photosensitization. The chemicals that cause this are found in many green plants including grass and would usually be processed by the liver. However, in liver failure they build up high enough concentrations in the blood stream to then become activated by sunlight and damage the surrounding exposed skin. Other common signs of liver failure are weight loss, diarrhoea and jaundice (yellow staining of tissue).



*Senecio jacobea* (Ragwort) in flower.



Normal Liver x40



Diseased Liver x40



Position of liver on horses right side, directly behind the diaphragm

Since ragwort causes damage to the liver cells many of these substances that would be contained within the hepatocytes leak out into the blood stream. By sampling blood we can run tests to check the levels of the substances. This process is called biochemistry and we use it to check the function of lots of other things as well as the liver. These values are then compared to normal reference ranges. Interpretation can sometimes be difficult as damage to the hepatocytes may have been occurring very slowly over a long period of time. Once the liver has been tipped over the edge to a state of liver failure there may not be high levels of these substances released into the blood stream. However we can also check for substances that are manufactured by the liver and if these are reduced this inherently indicates a degree of liver failure. Finally to confirm evidence of damage to the liver a biopsy (small piece of tissue) may be taken from the liver using an ultra-sound guided biopsy needle.

Unfortunately there is still not a commercial test available that can be run to identify the toxins from the Ragwort plant and as the clinical signs of ragwort poisoning do not differ greatly from other liver diseases pinpointing the exact cause can often be difficult. It is for this reason that there is much controversy about how many deaths there are per year from ragwort poisoning and many people on the Internet are quick to suggest there is not a significant danger. One thing, however, is for certain: Ragwort does cause some degree of liver damage and is easily preventable. Would you take the chance?

## DO



Keep paddocks in good condition prevent over grazing of fields. The use of fertilizers may help the grass density and help prevent ragwort from taking root.

Pull up ragwort from fields; this is a very effective control method where ragwort is not an extensive problem.

Spray individual plants before seeding in springtime. Dead plants should be collected or field rested until plants have rotted away.

Transport in sealed bags containers to prevent spread of ragwort seeds.

## DO NOT



Over graze paddocks and allow the grass mat to become sparse.

Mow down ragwort plants since this does not kill the plant. Horses may eat the more palatable cut ragwort plants. If plants are seeding mowing is a very effective way of distributing the seeds.

Compost Ragwort plants especially if they have seeded since this only encourages further seeding.

Cut hay from fields containing Ragwort

## Gastric Ulcer Awareness Day



We will be hosting a gastric ulcer awareness day 24th May. Gastric ulcers are much more common than we once thought effecting up to 64% of horses. This can lead to a wide range of problems such as: behavioural changes, poor performance and colic. One of our consultants, Dr Tim Brazil BVSc PhD DipECEIM Cert EM (IntMed) MRCVS, will be hosting a gastroscopie clinic throughout the day. He will be examining several horses' stomachs giving you the opportunity to see how ulcers are diagnosed. In the evening he will be giving an in-depth talk on the current science relating to the diagnosis and management of this important disease. We are looking for 8 horses to be gastroscopied and this will be free-of-charge. If you would like to have one of your horses examined please contact the office. The talk in the evening will be a ticketed event and for your free ticket please contact us – drink and nibbles will be provided!



### Feeding Instructions:

All horses: Feed 50g twice daily  
Ponies and foals: Feed 25g twice daily

Composition:	per 100g	per 1 kg
Calcium Carbonate	20,000mg	200,000mg
Magnesium Hydroxide	10,000mg	100,000mg
Seaweed extract (From Laminaria Hyperborea)	10,000mg	100,000mg
Fructo-oligosaccharides	10,000mg	100,000mg
Glutamine	3,800mg	38,000mg
Theonine	4,700mg	47,000mg
Excipients and Binders (Full Fat Soya, Kaolin)	41,480mg	414,800mg



Presentation: 3kg

Priors Farm Gastric Ulcer Supplement is a unique supplement, for daily feeding to horses prone to gastric disturbances. Priors Farm Gastric Ulcer Supplement will assist in maintaining optimum gut health and function, allowing maximum utilisation of feed. Priors Farm Gastric Ulcer Supplement supplies a unique formulation of prebiotics, amino acids, seaweed extract and specific minerals necessary to aid in the recovery and maintenance of a healthy digestive tract. It is sold in a convenient pelleted formulation.

## Artificial Insemination

Artificial insemination (AI) is an increasingly popular method of producing foals in the UK. AI offers several benefits to the mare owner: you can choose a stallion stabled anywhere in the world, you will have disease-free semen and your mare does not have to travel to a stud. The major disadvantage of AI is that pregnancy rates are not as high as with natural service. Natural service will give an average pregnancy rate of around 90% whereas AI pregnancy rates can be around 70%.

There are two main types of semen used in AI: chilled fresh semen or frozen semen. Chilled fresh semen uses relatively large volumes of semen that is normally less than 24-hours old. The semen must be used immediately and can not be stored. Due to the larger volumes of semen used, the AI the timing of insemination does not need to be precise, and therefore the labour involved in using chilled semen is much less than if using frozen. Frozen semen uses much lower volumes of semen but has a major advantage in that it can be stored in liquid nitrogen for many years. However as low semen volumes are used the timing of insemination must be very precise. It is for this reason that insemination with frozen semen is more expensive than with chilled semen.

If you are contemplating producing a foal, the earlier in the year you start to think about it the better! The mare is seasonally polyoestrous, i.e. she has many breeding cycles at a distinct time of the year, usually from April to October, and a mare's peak fertility is normally between April and June. The later in the year the lower the fertility, therefore to maximise the chance of a successful pregnancy (and to minimise the costs involved) breeding should ideally start in April and not July!

If AI is chosen over natural service it is very important that we know as accurately as we can when the mare is due to ovulate (produce an egg). Identifying when the mare comes in to oestrus

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(season) is extremely important, and whilst with some mares this can be obvious from their behaviour, with others it can be difficult. An ultrasound examination of the mare's ovaries and uterus will allow the timing of the next season to be roughly calculated. Further scans will then determine when in her cycle she is likely to ovulate by tracking follicles produced by the ovary. Follicles are the structures within the ovary that eventually produce an egg. In the mare usually only one follicle will ovulate and it is this dominant follicle that must be identified and tracked.

In most mares this is a relatively straightforward process, however in others the cycles are unpredictable. A variety of hormones are responsible for controlling the mare's reproductive cycle and pregnancy, these can be manipulated to control the mare's cycle. This allows ovulation to be timed within a 12-hour period.

For further information on AI please call the office and speak to either Duncan or Ben. We offer a range of AI packages that provide good value and at a fixed price per cycle. You can also find out more about breeding in general including foals at [priorsfarm.co.uk](http://priorsfarm.co.uk).

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## We're always happy to help

If you have any queries regarding an issue raised in this newsletter or have any other questions about your horse's health please don't hesitate to contact the team on:

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f: 01342 824342

e: [vets@priorsfarm.co.uk](mailto:vets@priorsfarm.co.uk)

w: [www.priorsfarm.co.uk](http://www.priorsfarm.co.uk)

If you missed the last newsletter it is available to view online along with a host of other information.



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