Does shoeing improve dressage performance?

Being shod or unshod is unlikely to affect the performance of a dressage horse, according to research presented at the 10th International Equitation Science Conference. This is in contrast to the widely held belief that shoeing improves gait quality.

Richard Mott and Julie Ellis conducted the study at Warwickshire College, Moreton Morrell, Warwickshire, England.

Twenty adult Irish Sport Horses used for a range of activities from general riding up to British Dressage Novice dressage (10 shod and 10 unshod) were recorded trotting in hand on a non-waxed fibre/sand arena surface using a high-speed video camera (120 fps).

The shod horses had been shod continuously for a year before the study. Similarly the unshod horses had been unshod for at least a year.

Using gait analysis software, the researchers assessed the differences in gait between the shod and unshod horses. They compared the findings against five criteria for gait quality (stride duration, fetlock extension, scapular rotation, elbow flexion and carpal flexion). They also compared stride parameters of speed, stride length, maximum hoof vertical displacement and swing duration.

Although there was a general trend towards greater joint flexion in the shod horses, the only highly significant differences (P<0.001) were carpal flexion (71±2° unshod compared to 79±4° shod) and maximum hoof vertical displacement (15±4 cm unshod compared to 21±4 cm shod).

The key dressage performance related indicators of stride duration, fetlock extension, scapular rotation and elbow flexion showed no significant differences according to foot treatment.

Stride length was significantly reduced (P<0.05) with the shod sample (2.67±0.10 m unshod compared to 2.59±0.10 m shod).

Previous studies have found highly significant increases in joint flexion associated with being shod when the horses were assessed within 1-3 days of being shod for the first time. However, in the current study, the researchers found that shod horses that had worn shoes for at least 12 months, did not display a significant difference in 4 of the 5 kinematic variables that correlate best with dressage marks. So they concluded that shoeing did not appear to confer a competitive advantage over competing unshod.

They suggest that as horses become used to the additional weight of shoes and over time, any initial effects on joint flexion become less apparent.

For more details:

**The unshod horse: A competitive disadvantage in dressage?**

Mott, R., Ellis J.

Equine obesity is an increasing but under-recognised welfare issue in the UK, according to new research from the Animal Health Trust (AHT).

The study, funded by World Horse Welfare, analysed data collected from 785 horses and ponies (31% of which were classified as obese), over a two-year period between 2009 and 2011, to examine factors that contribute to the risk of obesity in British horses and ponies. The findings have been published in the Equine Veterinary Journal.

Pony breeds, particularly UK native breeds, and heavier horses such as draught and cob types, were all significantly more likely to be obese compared to Thoroughbred horses. The increased risk may be due to these native breeds having adapted to thrive in harsh environments with sparse grazing available.

Charlotte Robin, Research Assistant at the AHT and lead author of the paper, said: “Native breeds may be genetically better adapted to survive in harsh conditions, having a so-called thrifty genotype, increasing their risk of obesity when maintained in an environment where food is of better quality and more readily available.”

Horses that were described by their owners as being able to gain weight readily or being “good doers” were more than three times more likely to be obese, compared to those that normally maintained weight.

The research also highlighted various links to human obesity. Charlotte explains: “In humans, obesity is associated with poor health status and chronic health conditions including diabetes, hypertension, respiratory disease and arthritis. Similar associations between obesity and adverse health events have been described in equines.”

Similarly in humans, exercise significantly improves insulin sensitivity, and it is thought the same “dose-response” effect is mirrored in horses. For example, the research shows that the risk of obesity is greater in pleasure or non-ridden horses, with pleasure horses being more than twice as likely to be obese and non-ridden horses being nearly three times more likely to be obese. Competition animals receive increased exercise at a higher intensity and so will be fitter than non-competition animals, further reducing the risk of obesity.

The AHT’s research has helped to highlight obesity as a significant equine welfare issue and provided valuable information for owners. People frequently misclassify their own weight or body shape, and this phenomenon also applies to perceptions about our pets’ weight. Dog and horse owners have been demonstrated to underestimate their animals’ weight, suggesting the prevalence of obesity in this study is likely to be an underestimation.

Charlotte explains: “It is possible that in certain breeds, being overweight or obese has been normalised to a certain extent. Owners may find it easier to identify an overweight Thoroughbred, compared to an overweight cob or native pony.

“Helping owners identify when their horse is overweight or obese is an essential aspect of reducing the welfare impact of equine obesity.”

Internationally acclaimed researchers Dr Hayley Randle and Dr Inga Wolfram will be taking part in a free podcast on equitation science.

Find out how this growing field of study can improve equine welfare, as well as your relationship with your horse.


The Equine Veterinary Journal has released its first podcast. It lasts for about 20 mins, and features Scott Pirie discussing his recent review paper on Equine Grass Sickness and Dr Barbara Murphy summarizing her research on light masks to advance the breeding season in mares.

You can find the podcasts at EVJ’s homepage.
Hops and fructan digestion

Research led by Brittany Harlow of the Department of Animals and Food Sciences at the University of Kentucky sought to determine if that antibacterial action could be used to limit the bacterial overgrowth that occurs in some cases of laminitis. Another aim of the study was to verify the antimicrobial mode of action on *Streptococcus bovis*, which has been implicated in fructan fermentation, hindgut acidosis and pasture-associated laminitis (PAL) in the horse.

They found that when suspensions of equine faecal micro-organisms were enriched with inulin (a type of fructan) they fermented the inulin resulting in acid production and a fall in pH. But when β-acid (lupulone) was added to the culture in concentrations ≥9ppm, lactate production was inhibited and the decrease in pH was limited.

They were able to isolate inulin-fermenting *S. bovis* from the fermented suspension. They also demonstrated that these organisms were sensitive to beta-acids, resulting in fewer viable organisms in faecal suspensions.

When they added beta-acid to pure cultures of *S. bovis*, they found a reduction in bacterial growth, reduced lactate production and decreased intracellular potassium of the micro-organism.

The researchers conclude that their findings support the hypothesis that hops β-acid prevented the growth of fructan-fermenting equine faecal bacteria, and that the mechanism of action involved dissipation of the intracellular potassium of *S. bovis*.

They suggest that hops β-acid is a potential phytochemical intervention to decrease the growth of bacteria responsible for pasture associated laminitis.

For more details see:

Inhibition of fructan-fermenting equine faecal bacteria and *Streptococcus bovis* by hops (Humulus lupulus L.) β-acid.
Harlow BE, Lawrence LM, Kagan IA, Flythe MD.

Could β-acid from hops be used to reduce the overgrowth of bacteria in the equine hindgut and control fructan fermentation in pasture associated laminitis? A recent report in the Journal of Applied Microbiology explored the possibility.

Hops are the cone-like flowers of the female hop vine (Humulus lupulus). A soft resin contained in the flower is used to give beer its bitter flavour and "hoppy" aroma. Among its constituents are β-acids, such as lupulone, which inhibit the growth of beer-spoiling bacteria.
Olympic Games. “For this reason it is interesting to consider whether a theory of riding that was developed exclusively for men can be applied to women,” explains Natascha Ille, the first author of the recent publication.

Ille, Christine Aurich and colleagues from the Vetmeduni Vienna’s Graf Lehndorff Institute tested this notion by examining eight horses and sixteen riders, including eight men and eight women. Each horse had to jump a standard course of obstacles twice, ridden once by a male and once by a female of similar equestrian experience. The scientists monitored the levels of stress in the horses and their riders, checking the amounts of cortisol in the saliva and the heart rates.

The results were unexpected. The level of cortisol in horses’ saliva increased during the test but the increase was not affected by the sex of the rider. The horses’ heart rates also increased as a result of taking the course but the increase was irrespective of the human partner in the saddle. The tests on the riders gave similar conclusions. Again, the level of cortisol in the saliva increased but there was no difference between men and women. The riders’ pulses sped up when the horses switched from a walk to a canter and accelerated further during the jumping course. But the heart rate curves for male and female riders were close to identical.

In a second experiment, Ille and her colleagues studied the pressure exerted on a horse’s back via the saddle. She explains, “Depending on the rider’s posture and position, the pattern of pressure on the horse’s back may change dramatically.” A special pad placed directly under the saddle was used to analyse saddle pressure in walk, trot and canter. Because female riders are generally lighter than males, it was no surprise that the saddle pressure was lower when horses were ridden by females. However, the distribution of pressure did not differ and there was no evidence of differences in the riding posture between males and females.

Modern-day equestrian sports are unique in that men and women compete directly against one another at all levels, from beginners in gymkhanas to national champions in the Olympic Games. “For this reason it is interesting to consider whether a theory of riding that was developed exclusively for men can be applied to women,” explains Natascha Ille, the first author of the recent publication.

As Ille notes, “It is often assumed that women are more sensitive towards their horses than men. If this is so, male and female riders should elicit different types of response from their horses”.

Ille, Christine Aurich and colleagues from the Vetmeduni Vienna’s Graf Lehndorff Institute tested this notion by examining eight horses and sixteen riders, including eight men and eight women. Each horse had to jump a standard course of obstacles twice, ridden once by a male and once by a female of similar equestrian experience. The scientists monitored the levels of stress in the horses and their riders, checking the amounts of cortisol in the saliva and the heart rates.

So what does all this mean for modern equestrian sports? Aurich is keen to reassure potential competitors that horses are truly gender-neutral. As she puts it, “Assuming that there is no difference in riding ability, from the horse’s point of view, it does not seem to matter whether the human partner is male or female. Our results make it extremely

Horses seem to be truly gender-neutral. It doesn’t matter to them if their human partner is female or male. (Photo: Juliane Kuhl / Vetmeduni Vienna)
Can equestrian professionals recognize signs of stress in the ridden horse?

The interpretation of ridden horse behaviour by equestrian professionals, vets, instructors and riders, was found to differ from that suggested by physiological evidence, according to Nottingham Trent University researchers Carol Hall, Rachel Kay and Kelly Yarnell. They presented their work at the 10th International Society for Equitation Science conference, held recently in Denmark.

Ridden horse behaviour was assessed by twelve equestrian professionals (4 instructors, 4 riders and 4 veterinary surgeons) as they viewed video footage of ten horses that were ridden at walk, trot and canter in a predefined ridden test lasting 2-3 minutes. The horses were scored on seven performance parameters derived from the Fédération Equestre Internationale (FEI) rules for dressage and German National Equestrian Federation scales of training (relaxation, energy, compliance, suppleness, confidence, motivation and happiness).

The scientists also analysed the video footage independently. All aspects of the behaviour of the horses were recorded including ear position and movements, tail position and movements, mouth movements and salivation, auditory signals, head and neck position and nasal angle. Horses’ nose angles (behind and in front of the vertical) and head carriage (high, neutral and low indicated by the position of the horses’ nose relative to the body) were analysed.

In general, equestrian professionals scored horses who spent most of their time with a high head carriage negatively; and those with a lower head carriage more positively. This was contrary to the physiological evidence from stress related hormones measured in saliva and eye temperature. Only the instructors associated neutral head carriage (nose in line with body) and nose angle as a positive sign. FEI guidelines state that the nose should always be in front of the vertical and the physiological data gathered in this study supports this principle. Increased awareness of, and reference to, the FEI guidelines would ensure more consistent evaluation of ridden horse behaviour occurs.

For more details see:

Physiological stress responses and horse rider interactions in horses ridden by male and female riders.

unlikely that horses have a preference for riders of one sex over the other. And when male and female riders compete against one another in equestrian sports, all of them have similar chances of doing well.”

For more details see:

Can equestrian professionals recognize signs of stress in the ridden horse?
Carol Hall, Rachel Kay, Kelly Yarnell
Proceedings 10th International Society of Equitation Science conference (2014) abstract no 6; p26
It is often assumed that giving birth is both stressful and painful for the mother. This may be the case for humans but does it also apply to horses or are we transferring human experiences to the animals? Scientists at the Vetmeduni Vienna have investigated the stress associated with birth in horses and other domestic animals. The findings show that contrary to expectations mares appear to be completely relaxed when foaling.

Foaling in horses is extremely fast. Labour and the active part of foaling, resulting in delivery of the foal, take 10 to 20 minutes - considerably shorter than the time taken to give birth in humans or in cows. Is this brief period stressful for the animals or are horses more relaxed than humans when giving birth?

This issue has been addressed by Christina Nagel and colleagues, who closely observed 17 foalings at the Brandenburg State Stud in Neustadt (Dosse), Germany, as well as recording electrocardiograms before, during and after foaling. The researchers also took samples of saliva and blood and analysed the levels of stress hormones such as cortisol and epinephrine. As Nagel summarizes, “Normal foaling appears to cause just the opposite of a stress response”.

Surprisingly, during labour the heart rate of mares does not increase. On the contrary, the mares even miss some individual heart beats due to delayed stimulus conduction in the heart. In humans, such second-degree atrioventricular (AV) blocks often require medical treatment but many healthy horses show AV blocks at rest. On physical activity, when the horse is ridden, the heart beat becomes regular and the beat frequency increases. The finding of AV blocks during foaling suggests that mares are strongly influenced by the parasympathetic nervous system, which usually causes a state of rest and relaxation. Its antagonist, the sympathetic nervous system, would prepare the organism for a stress response but does not seem to be active while the animals are giving birth.

The level of stress hormones remains low in foaling mares and the researchers did not find an adrenaline rush at any point. Foaling clearly does not evoke a stress response. The need to care for the newly born foal was also not perceived as stressful: contact between the mare and the foal was associated with a further state of relief and relaxation.

Horses thus experience giving birth very differently from human mothers. They need a safe environment to give birth: all the foals in the study were born at night, when the stable was quiet. As the Head of the Research Group, Christine Aurich, explains, “Parturition in horses requires a
Predicting foaling problems

Foals are normally born head and front feet first. This is known as anterior or cranial presentation. Posterior presentation (being born hind end first) is not only rare, probably accounting for less than 0.2% of all births, it is bad news. It often results in death of the foal, which may either be born dead, or die soon afterwards.

Having advance warning of a posterior presentation birth may allow early intervention to minimise problems.

It is possible to identify the orientation of the foetus on ultrasound scan. But it seems that another indication that a mare is at high risk having a posterior presentation foaling is the knowledge that she has done so on a previous occasion.

Writing in the Veterinary Record, John Newcombe and Gary Kelly report five instances of posterior presentation in consecutive pregnancies in two mares (one a thoroughbred; the other a gypsy cob). As posterior presentation is generally very uncommon, they conclude that once a mare has given birth to a foal hind legs first, she is likely to do so again at the next foaling.

They point out that posterior presentation of the foal frequently results in death of the foal at birth or shortly afterwards - even in the absence of dystocia. So they advise that any mare known to have foaled posteriorly in the past should be considered at risk of doing so again, and should be monitored closely as she gets near to foaling.

They suggest that measures such as elective caesarean section might be considered since parturition is likely to result in dystocia and possible death of the foal due to fluid aspiration, limb malposition or rib fracture.

For more details see:

Five cases of consecutive posterior (caudal) presentation of the fetus in two mares. Newcombe JR, Kelly GM. Veterinary Record (2014) 175, 120 10.1136/vr.101532

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Ill-fitting saddles blamed for back pain in horse and rider

Ill-fitting saddles are not only associated with back muscle asymmetry, a stilted gait and back pain in the horse but they are also associated with back pain in the rider. These are the key conclusions from a new study looking at saddle fit, back shape and rider health.

However, identifying the order of cause and effect is complex. The results strongly suggest that saddle fit should be checked regularly and that riders and trainers should be encouraged to learn how to identify ill-fitting saddles. In addition, the study highlights the importance of being able to recognise lameness, saddle slip and rider crookedness.

Although sport horses are becoming increasingly valuable, previously there has been little objective exploration of the horse-saddle-rider interaction. In particular, there has been little work on the potential consequences of a saddle not fitting the horse, or the saddle not allowing the rider to sit in a position in which they can ride in balance.

The study was conducted by Dr Sue Dyson, Head of Clinical Orthopaedics at the Centre for Equine Studies at the Animal Health Trust (AHT) and Line Greve, PhD student at the AHT and was supported by World Horse Welfare (WHW).

A clinical assessment of the horse and rider was performed and information was subsequently obtained from the same riders via an online questionnaire, without the riders being aware of the link between the two initiatives. The horses were selected from a variety of work disciplines, were in regular work and were presumed by their riders or owners to be sound. Asymmetries of the back were assessed and any presence of lameness observed. Saddle slip, fit and management as well as rider straightness were evaluated from both the clinical examination and questionnaire responses.

A total of 205 riders responded to the questionnaire, ill-fitting saddles were identified in 43% of horses during the clinical assessment. Saddle slip was observed in 14.6% of horses, which was significantly associated with hindlimb lameness or gait abnormalities. However, only two riders had linked saddle slip and lameness despite strong associations between a history of lameness, history of “back problems” and history of saddle slip.

Back pain was reported by 38% of riders. In the clinical assessment this was associated with ill-fitting saddles and either a reduced airborne phase of the step in all four limbs or a stiff, stilted canter, suggesting pain. Rider back pain was also associated with rider crookedness. Well-fitted saddles were associated with frequent saddle fit check. Horses ridden by expert riders were less likely to have asymmetry of the back compared with those ridden by non-expert riders.

“Ideally saddle fit should be checked more often than once a year to reduce the instances of ill-fitting saddles.” said Line Greve. “Yet this isn’t the whole solution because worryingly, 30% of horses that had their saddles checked at least once yearly still had an ill-fitting saddle. What is unknown is whether these saddles had ever fitted correctly or whether a properly qualified saddle fitter was responsible for the fitting. It can only be of benefit for riders, trainers and other associated professionals to become more educated about the complexity of the links between lameness, saddle slip, ill-fitting saddles and rider crookedness.”

The full results of the study will be presented at the Saddle Research Trust International Conference to be held in Cambridge 29 November 2014 at Anglia Ruskin University.

For more details see: www.saddleresearchtrust.com
Sore back? Poorly-fitting saddle? Lameness? It’s often difficult to identify the underlying cause of poor performance. A new referral scheme, launched by the Saddle Research Trust (SRT), aims to help riders tackle saddle-related problems. The scheme gives riders access to the expertise and advice of a world-leading authority at a manageable cost.

Riders often relate saddle-fitting problems and equine back pain to loss of performance. However, recent studies showed that horses with saddle slip syndrome were more than 50 times more likely to be lame or have gait abnormalities; that 46% of horses were lame or had gait abnormalities and that 43% of saddles were ill-fitting.

However, lameness can often be difficult to recognise which can lead to potential welfare problems for the horse and can have implications for the rider as well. A further study has identified a clear link between ill-fitting saddles and back pain in the rider.

“The Saddle Research Trust receives around two requests every week for advice on saddle-related issues,” said SRT founder Anne Bondi. “Many horse owners report that they feel trapped in a seemingly unending cycle of veterinary/musculoskeletal/saddle fit assessments without ever determining the underlying cause of the problem. The lack of a definitive diagnosis can be expensive but most importantly has the potential to result in a permanently damaged horse.”

The new referral scheme, which is exclusive to SRT Members and Friends, aims to help owners resolve their saddle-related problems. Potential cases can be submitted to the SRT for an initial assessment and if deemed suitable will be passed, with the permission of the owner’s usual vet, to the SRT’s veterinary advisor Dr Sue Dyson at the Animal Health Trust, Newmarket, for a full assessment at a fixed cost of £335 plus VAT.

Dr Dyson MA, VetMB, PhD, DEO, FRCVS, is a world-renowned expert in equine orthopaedics, with a particular interest in lameness and poor performance in sports horses. A British Horse Society Instructor, who has trained horses and competed to Advanced level Eventing, Grade A Showjumping, Medium level Dressage, Dr Dyson has the additional advantage of a real rider’s perspective.

Dr Dyson will conduct an independent and thorough review of the past history plus an examination of the horse, saddle and rider interaction, including physical and visual evaluations as well as in-hand, ridden and saddle fit assessments. A written report will then be provided for the owner and their associated professional practitioners.

Dr Dyson said: “The SRT has taken a valuable step forward in raising standards of welfare and practice in the industry with this important referral scheme and I am pleased to support it.”

The new referral scheme will be showcased at the forthcoming Saddle Research Trust International Conference, to be held in Cambridge on 29th November 2014 at Anglia Ruskin University.

To find out more and to download a copy of the programme visit www.saddleresearchtrust.com
Most owners think they know when a horse should wear a blanket or go without. Wouldn’t it be interesting to know what the horse thought? Well, research presented at the 10th International Equitation Science Conference, suggests that horses can be taught to use symbols to express their preferences regarding blanketing/rugging.

“Horses can learn to understand the meaning of abstract symbols and to use these to communicate with humans” stated researcher Cecilie Mejdell. The study was conducted by Mejdell with colleagues Turid Buvik, Grete Jørgensen and Knut Bøe from the Norwegian University of Life Sciences, Norway.

The aim of the project was to teach horses to use symbols to express their preferences regarding blanketing.

Professional animal trainers carried out a ten step training program. Horses were trained for 10-15 minutes per day, 5-7 days a week. Using operant reward based conditioning, horses were trained to approach and touch a board (35 x 35 cm) with the muzzle, firmly and without hesitation

The training involved association learning between visual symbols on boards and meaning.

One symbol meant “blanket on”, another meant “blanket off”. Once the horses had learned those, a third symbol meaning “no change” was introduced. Horses were deemed to have learnt the meaning of different symbols when they expressed meaningful symbol choices when tested 14 times in a row under pre-determined hot or cold environmental conditions.

All horses that took part in the study, (13 cold-bloods and 10 warm-bloods of various breeds, age 3-16 years) learned to do this. Speed of learning varied between horses. Nevertheless, free choice could be introduced within 13 days for all horses.

At this stage, responses given by horses were not influenced or corrected by the trainers and the horse’s response (its decision regarding blanketing/rugging) was rewarded. From this it was assumed that the horses understood that their free choice, as expressed by touching a specific symbol, determined the nature of blanketing (i.e. blanket/rug put on, taken off or no change made) and even that they understood the consequence in terms of thermal comfort for the next hours.

The horses’ preferences were tested under differing weather conditions including sunshine, wind, rain/snow and temperatures ranging from -15 to +20 °C. Horses were left outdoors for two hours before being given the choice to change, or not change, blanket status.

Results revealed that the choices made by the horses were individually consistent and influenced by weather conditions. In general, cold-blood horses preferred to stay without a blanket more often compared to warm-bloods.

The researchers conclude that horses can learn to understand the meaning of abstract symbols and to use these to communicate with humans. This provides a promising tool for studying preferences in horses, as in other species. Whether a horses prefers to have a blanket on or off differs between individuals is influenced by weather conditions.

For more details see:


The 10th International Society for Equitation Science conference, held recently in Denmark, offered an opportunity for scientists and professional practitioners to present and discuss research related to the field of equitation science. This year's theme was Equine Stress, Learning and Training.

One of the main aims of ISES's work is to provide objective, evidence-based knowledge to the end user- i.e. the equestrian practitioner - at all levels. Identifying ways of bridging this gap is crucial. In order to facilitate this, at least in part, each scientific abstract is accompanied by a Lay Persons Message to assist with the education of others.

The 2014 ISES conference proceedings are now available on the ISES website:

www.ISES2014.com
Horse owners sought for laminitis research

More than 3,000 horse and pony owners are needed to collaborate on a new web-based research project that aims to help all horse and pony owners reduce the threat posed by equine laminitis.

The four-year study, named 'CARE (Creating Awareness and Reporting Evidence) about laminitis', is being undertaken by the Animal Health Trust (AHT), in partnership with the Royal Veterinary College (RVC). Funding for the project is being provided by World Horse Welfare.

The study is being conducted by PhD student, Danica (Dee) Pollard, who is based at the AHT. It will take a closer look at management factors that may contribute to the development or recurrence of laminitis within the British horse and pony population.

Dee said: “This is an exciting opportunity for equine owners in Britain to actively take part in scientific research and contribute towards a study that seeks to improve the health and welfare of British equines. We need input from as many owners as possible, so please register your animal(s) today. Each and every horse and pony is an eligible candidate and can join the study, regardless of past or present health status.”

This study builds upon previous research conducted by Dr Claire Wylie, also funded by World Horse Welfare, where factors including rapid weight gain, increasing time since last deworming, box rest in the previous week and new access to grass in the past month were shown to increase the risk of laminitis in horses and ponies. Dr Wylie’s study also revealed that other factors such as transport in the previous week and the feeding of supplements were associated with reduced laminitis occurrence.

Collectively, these factors are of particular interest to the new study because they are all modifiable, and can be changed by the owner. Through modifying these contributing factors, it is hoped that horse owners can greatly reduce the significant welfare impact of this debilitating disease.

Through the dedicated website, Dee Pollard and the ‘CARE about laminitis’ team aim to recruit more than three thousand horse and pony owners throughout Britain, in order to get a representative sample of the population and allow application of the study results to real-life situations.

Dee explains: “We need owners of any horse or pony, regardless of whether or not they have a history of laminitis, to register their animal(s) today. This will provide general information about their animal, their management and previous and current health.”

Owners will subsequently be asked to review previously submitted information on a monthly basis, documenting any changes to the management routine or health of their animal(s). Owners will also be required to report any episodes of laminitis in their horses/ponies via an online reporting form. Information from the registered cohort of animals will be collected over a two-year period.

Capturing changes in the animal’s environment as they happen, and the occurrence of laminitis, will create a timeline of events, increasing certainty that exposure to a factor actually contributes to laminitis occurring or not occurring.

Dee states: “It is essential that we gather a large amount of data on individuals that will and will not develop laminitis, so that we can compare the two groups and establish whether the laminitic animals were more or less likely to be exposed to certain factors when compared to those that never developed the disease.”

Roly Owers, Chief Executive at World Horse Welfare, said: “We need the help of horse owners through contributing to online diaries and logging their individual horse management practices and recording any change – this will help identify what does or does not contribute to the development or recurrence of laminitis.

Horse owners interested in taking part in the ‘CARE about laminitis’ research project can register at www.careaboutlaminitis.org.uk, or for more information email danica.pollard@aht.org.uk.
The British National Equine Health Survey (NEHS), held annually every May, has confirmed for the second year that lameness is the most common syndrome affecting the country’s horses and ponies. This year’s results have also revealed an apparent increase in laminitis compared with previous years.

Participation in the survey increased significantly this year. Data was collected from 11,002 horses, ponies, donkeys and mules across the UK, more than double last year's figure of 4,730. The majority of horses reported (88%) were kept either in livery yards or private yards, with only 0.7% kept by equine welfare charities.

This year’s results revealed that almost one in five (18.5%) horses were suffering with lameness due to joint disease or other non-foot related problems. The results are consistent with last year’s non-foot related lameness figure of 18.6%. Foot lameness (not including laminitis) accounted for only a quarter of all lameness.

Laminitis had a much higher prevalence than in previous years (7.1%) with 43% of these recorded as first episodes. Past NEHS results showed a lower number of horses affected by laminitis (4.4% overall prevalence of laminitis, with only a few cases of infectious diseases reported (0.3%).

Josh Slater from the Royal Veterinary College, who analysed the data, commented: “Year on year we are building a unique database on the health and disease status of the UK equine population that will allow health benchmarking across the equine industry. The annual surveys have shown consistent trends and already challenged some established dogma on disease prevalence, for example laminitis, and validated much of the accepted veterinary opinion, for example on lameness and colic.”

Overweight horses or ponies were recorded in 16.9% of cases, twice as many as the previous year (7.8%). Most horses (79%) were recorded as being ideal/normal weight and 4% recorded as being underweight.

The recorded increase in obesity may be the true picture, resulting from the previous mild winter and greater availability of food. It could also indicate increasing awareness of the problem. 59% of respondents claimed that they assess weight regularly, with 85% using weigh tapes.

Respiratory disease was reported by 7.1% of respondents, a slight increase on previous years (5% in 2013). Allergic respiratory disease accounted for the vast majority (96%) of respiratory problems, with only a few cases of infectious diseases reported (0.3%).

Skin disease was recorded in 18.3% of cases (14.6% 2013, 15.2% 2010-2012). Sarcoids were again prevalent (5.6% 2014; 2.8% 2013; 3.25% in NEHS 2010-12), reinforcing previous NEHS surveys and the published data.

To download a copy of the results please visit www.bluecross.org.uk and to register for next year’s survey please visit www.bluecross.org.uk/nehs