



### **Final grant report form: Norman Hayward Fund**

The terms and conditions of Animal Welfare Foundation Grants require recipients to complete a final report giving a summary of the work undertaken, including a layman's version which AWF can use in its own publications and in disseminating research results to the general public.

The final report is an opportunity for you to share details of the achievements and implications of the project that AWF has supported. The information is valuable as it allows AWF to assess and review the outputs and outcomes of the projects that we fund and enables the trustees to ensure that research has been carried out in accordance with AWF's charitable objectives.

**Please complete and save this form electronically in Word, and return it as an e-mail attachment to the Manager at [bva-awf@bva.co.uk](mailto:bva-awf@bva.co.uk) . This is also the person you should contact if you have any queries about completing the report.**

<b>PROJECT/STUDY TITLE:</b>	INVESTIGATION OF HORSE OWNERS' PERCEPTIONS AND ATTITUDES TOWARDS EQUINE HEALTH AND WELFARE
<b>PRINCIPAL APPLICANT(S)</b>	Prof. Debra Archer Co-applicants: Prof. Elizabeth Perkins, Dr. Rob Christley, Dr. Gina Pinchbeck & Dr. Cathy McGowan.
<b>GRANT AWARDED (DATE):</b>	November 2011 (Project commenced November 2012) NHF_2011_02_DA

#### **Lay summary of project outcomes, achievements and potential impact: Max 300 words**

Laminitis is a common condition in horses and ponies and has major implications for horse health and welfare. It is also a condition of major concern to horse owners. Using methods that social scientists utilise to investigate human health issues, we used focus groups with veterinary surgeons and individual interviews with horse owners to investigate the challenges that both groups face in managing horses with laminitis and in preventing laminitis.

A questionnaire-based study was also used to investigate where horse owners seek information about laminitis and general horse health from. The study found that veterinary surgeons face a number of challenges when dealing with laminitis cases including owners delaying seeking veterinary advice/treatment and sometimes failing to adhere to advice about management of laminitis cases and ways in which repeat episodes could be prevented. A lack of research about prognosis in individual cases of laminitis was also frustrating for veterinary surgeons. Horse owners found the information about causes of laminitis confusing and were sometimes unsure of the relevance of potential signs of laminitis such as digital pulses and rings on the hoof wall. Common areas of frustration for horse owners looking after horses with laminitis or preventing laminitis included soaking hay, managing horses on box rest, exercise and opinions from other horse owners about the ideal body condition for a horse, dieting horses and putting rugs on horses.

Horse owners frequently sought veterinary advice about laminitis but internet websites and forums were commonly accessed to obtain information about horse health. The results of the study were presented in two meetings with equine industry representatives and a laminitis website, leaflet and booklet resources have been developed. The results of this study provide important information that can be used to inform future educational campaigns aimed at improving equine health and welfare.

**Detailed progress against original objectives:** List outcomes against original objectives. Discuss what has been achieved, including any statistical analysis completed as part of the project.

**Original study objectives:**

The aim of this project was to investigate horse owners' knowledge and attitudes to prevention and management of equine laminitis. This included obtaining information about factors associated with the decision to seek veterinary advice by horse owners for a variety of equine health and welfare issues, with a particular focus on laminitis, the sources and frequency of equine health information use and strategies for education of horse owners about laminitis and other equine health problems. All this work was conducted with the approval of the University of Liverpool Veterinary Ethics Committee an informed consent was obtained from all participants.

This work was undertaken in 4 specific phases:

- Phase 1. Focus group discussions with veterinary surgeons
- Phase 2. In-depth interviews with horse owners
- Phase 3. Questionnaire study of horse owners
- Phase 4. Knowledge exchange workshops with equine industry representatives

**A detailed report with a summary of the findings from each of these stages is included in the attachments (Full report PDF document).**

**Additional outcomes:**

Please see knowledge transfer activities sections for further details about the laminitis website, leaflet and booklet that have been developed taking into account current research on laminitis and findings from the focus groups, individual horse owner interviews, horse owner questionnaires and the two knowledge-exchange meetings.

**Were there any challenges or barriers/modifications to the project?** Explain the nature of and reasons for any changes in project focus, scope, delivery, schedule or evaluation.

Focus groups at the beginning of the study were conducted with only veterinary surgeons rather than a mix of professionals as we felt that professionals would likely feel more comfortable talking among their peers rather than cross-professional dynamics around handling laminitic cases. In this respect, we held focus group discussions among veterinary surgeons with a variety of experience of laminitis and varying numbers of years since graduation. In-depth interviews were also conducted with farriers and nutritionists to gain an idea of what sorts of information these professionals may provide to horse owners.

Recruitment for the focus groups and workshops was time consuming and took a large portion of the final 4 months of the grant time. This meant that writing up papers for publication was slightly delayed. However, preparing for the workshops where the findings were shared with a cross-section of the equine industry meant that a lot of the ground work for the publications is complete and two papers are already in advanced stages of preparation prior to submission for peer review. The workshops were extremely well received and provided a forum to hear reactions from the findings from the study and stimulate debate among those in a position to deliver educational messages to the wider horse-owning public.

**Provide details of knowledge transfer activities to date and any future plans/actions.**

Veterinary practices were contacted to ask if they would advertise the study on their practice webpages through a letter published in the Vet Record published in the letters section Volume 176 Issue 2 (2015), <http://veterinaryrecord.bmj.com/content/176/22/580.1.full>.

### **Conference presentations**

Results from work conducted during the project have been presented at 3 international veterinary conferences.

#### **British Equine Veterinary Association annual congress 2014 - clinical research abstracts**

Riding the rollercoaster: Veterinary experiences of managing laminitis in practice. Scantlebury, C.E., Perkins, E., McGowan, C., Pinchbeck, G.L., Christley, R.M., Archer, D.C. Abstract available in Equine Veterinary Journal, Vol. 46, Supp. 47, Page 9.

#### **International Society for Veterinary Epidemiology & Economics, Mexico November 2015 - Oral presentation**

Vet-client communication and approaches to managing equine laminitis. Claire Scantlebury<sup>1</sup>, Elizabeth Perkins<sup>2</sup>, Cathy McGowan<sup>1</sup>, Gina Pinchbeck<sup>1</sup>, Rob Christley<sup>1</sup>, Debra Archer<sup>1</sup>,

#### **British Equine Veterinary Association annual congress 2015 – Main lecture session (Hospitalised horses and their owners)**

Horse owner approaches to equine health and the role of veterinary advice. Dr. Claire Scantlebury

### **Webpage**

A website has been developed taking into account the findings from the study, with a key emphasis on providing evidence-based information about what laminitis is, why it develops, how to manage laminitis cases and prevention. This provides information relevant to horse owners and other equine industry stakeholders.

<https://www.liverpool.ac.uk/equine/common-conditions/laminitis>

### **Leaflets**

A leaflet on laminitis has been designed for horse owners taking into account the findings from the AWF funded study. The PDF of this leaflet is available to download from the website and print copies will be available (see final section of this report). We will send the AWF leaflets if they wish.

### **Laminitis information booklet**

This is in the final stages of design and a copy will be sent to the AWF if they wish prior to printing. This is a 20 page A5 booklet that will give more detail and will complement the information given on the website and in the leaflet. Particular focus will be given to areas where horse owners commonly report that they are confused with existing information and in advice around prevention and management of laminitis cases, taking into account the feedback from veterinary surgeons, horse owners and equine industry representatives.

### **Future plans / actions**

The website and leaflet will be publicised in the next 2 months via the veterinary and horse owner press. Once each of the 3 publications currently in preparation have been submitted for peer

review and accepted for publication, we will publicise the results of this work in various veterinary (e.g. Veterinary Times) and horse owner publications (e.g. Your Horse, Horse & Hound magazines) and will publicise each through facebook and other internet forums. A link to the summary from each of the publications will be hosted on the existing laminitis webpage.

**Provide details of any original peer-reviewed research papers, book chapters and books/monographs that have resulted directly from your work supported by this grant.**

Currently, three papers are in preparation for submission for publication in peer-reviewed veterinary journals. The first two are in draft form and will be submitted for review by October 2016 and the final paper by December 2016

- **Horse health information seeking and horse owners in the UK: a mixed method study** *[planned submission to Equine Veterinary Journal]*
- **Managing client expectations; Veterinary approaches to dealing with laminitis in practice (focus group discussion write up)** *[planned submission to BMC Veterinary Research – open access journal]*
- **Owner approaches to management of laminitis: a mixed method study** *[planned submission to Preventive Veterinary Medicine]*