

Final grant report form: student grants

Project title:	Evaluation of the prevalence, nature and distribution of skin wounds in donkeys in Tamil Nadu, India
Researcher:	Dr Emma Rayner
Year awarded:	2017

Provide a <u>lay</u> summary outlining the project, focusing on the project's achievements and potential impact to animal welfare. You could include outcomes against original objectives; challenges to the project and any statistical analysis completed as part of the project.

A comprehensive report is attached as an addendum to this Final Grant Report Form.

This study focused on assessing the prevalence, nature and distribution of skin wounds in donkeys in 5 locations in Tamil Nadu, India. Data was collected using a smartphone app whilst undertaking routine assessments and treatments of donkeys in each location. The study aim was to understand the welfare issue affecting donkeys with specific focus on wounds, to enable future, targeted interventions on those issues which affect welfare. Results showed that overall welfare of donkeys in the five locations was of a reasonable standard. This is unsurprising and likely reflects the interventions and education provided by WVS staff in previous donkey camps. Issues were identified both with mutilations practices and with wounds resulting from incorrectly fitting harnesses and the use of hobbles as restraints. Although donkey numbers were low in some locations, the data demonstrates that welfare issues vary regionally, and that recognition of region-specific practices enables targeted owner education.

There was evidence of a range of mutilation practices that had occurred previously in all five locations. Although information on when they were carried out was not available, the data highlights their common occurrence and that continued, targeted owner education is required to highlight the pointless nature and significant welfare issues associated with such practices. More comprehensive data collection can be addressed in future studies. The other main focus for improvement is continuation of education of owners with respect to restraint practices (hobbles) and harness use. The use of hobbles has been shown to result in a high prevalence of wounds in India, reported as 81% in one study (1). Their use can negatively impact on multiple aspects of welfare; this includes prevention of fully accessing food and water; cause of pain, injury and distress; and restricting the ability to express natural behaviours e.g. grazing, socialising. Ways of avoiding or reducing the use of hobbles should continue to be encouraged. The use of an alternative method of restraint is recommended, for example head collar or neck rope. These may be more challenging in animals that are not used to being handled or are scared due to previous, negative incidences. Encouragement should be given to owners to handle and treat their animals with respect to enable effective training and a good relationship between animal and owner.

If hobbles are used as a way to attempt to reduce the incidence of aggression, alternatives can be suggested, for example castration of males. A focus on castration is already being achieved in donkey camps run in this area, and further data collection will help to assess the positive effects. As causes of aggression can be multifactorial, a comprehensive approach to assessing the causes of aggression could be considered in areas where fight-related wounds are high.

Where alternative methods to hobbling are difficult to implement, owners can be encouraged to use soft or padded materials that do not result in painful wounds. Similarly, simple techniques such as soft material or padding under pressure points to reduce the frequency of harness-related injuries can be encouraged. The aim is to prevent

wounds altogether, as active wounds that are continuously disrupted by harness rubbing are likely to be difficult to treat.

The study design enabled a wide range of data to be collected easily using the smartphone app. This is a valuable observation and proves that this method is suitable for future assessments requiring "in-field" data collection, particularly in new locations that the charity may visit in future ventures.

This particular study was constrained by locations that had already been visited by the WVS in previous donkey camps. As a result, data was collected on donkeys which had been treated previously and where owner education had already been carried out. Therefore, this population did not likely represent the general population of Indian donkeys and explains the improved health and welfare of donkeys in this study compared to other published studies (2, 3). However, data collected showed that improvements in donkey welfare had likely been achieved through previous interventions and highlighted the ongoing issues still facing donkeys with respect to specific wounds, both mutilations and non-mutilations. The success of such data collection using the smart phone app, and the improvements found, indicates that the charity has had a positive impact on donkey welfare through their donkey camps programmes.

In summary, this study has (1) provided valuable information on lesions and overall welfare issues faced by donkeys in specific regions in Tamilnadu which will enable future, targeted educational programmes to improve welfare; (2) highlighted the ongoing, positive work carried out by the WVS in improving donkey welfare and (3) provided proof of principle that collection of data on donkeys in Tamilnadu in field conditions is achievable using a smartphone app, which will enable further, more in depth welfare studies to be carried out. There is the aim to design future, larger scale, welfare-focused studies in additional locations identified by the WVS staff, whereby baseline data will be collected prior to interventions, enabling direct comparisons and further understand the effectiveness of the donkey camps currently carried out by the charity.

References:

- 1. Zaman S F. Hobbling: An Equine welfare issue 2008 [13th September 2017]. Available from: http://www.fao.org/fileadmin/user_upload/animalwelfare/Hobbling_article.pdf.
- 2. Pritchard JC, Lindberg AC, Main DCJ, Whay HR. Assessment of the welfare of working horses, mules and donkeys, using health and behaviour parameters. Preventive Veterinary Medicine. 2005;69(3):265-83.
- 3. Probhakar Biswas TD, M. Patel, Reena Kamal, P.K. Bharti, Subhasish Sahu. Assessment of pack animal welfare in and around Bareilly city of India. Vet World.6(6):332-6.

Provide a short description of your personal experience in undertaking this project

I have enjoyed undertaking this study very much. It has been a pleasure to work with the WVS staff who undertake and achieve such a large amount for animal welfare and veterinary surgery teaching in India. To be able to support their work and provide them with a deeper understanding of the challenges they face has been a privilege. Through the kind support of the BVA AWF, I have been able to design and implement a welfare assessment to study wound prevalence in donkeys in Tamil Nadu, and demonstrate that the type of data collection, through the use of a smartphone app, is practical and achievable in field conditions, such as the donkey camps currently run by the WVS. We have collected useful data to enable further, targeted educational programmes in these areas, as well as new locations where donkey welfare is compromised.

I have been involved in this project remotely, and all communications have been achieved through email and skype. The WVS staff in Ooty, India have undertaken the work and collected the data. I have liaised with WVS staff at their headquarters in Cranborne, Dorset, to ensure that their expectations regarding type of data and locations etc. have been met.

I hope to initiate and carry out further assessments in the area of donkey welfare in India, as

well as other welfare studies in other species, and I shall use the experience and knowledge that I have gained from this project to apply for future grants and continue to strive to improve animal welfare in areas of need.

Thank you to all the AWF Trustees for their support of this project.

Use the space below for any other relevant information you wish to report on. This could include details of knowledge transfer activities and any future plans/actions.

The data is already being prepared for submission in a suitable peer-reviewed journal, most likely the Vet Record, with the option of a poster presentation at an animal welfare conference. Full acknowledgements will be given to the BVA AWF.