

Welfare of working equids in Mexico assessed using observational means

A report by Caroline Foalks

As part of the final year of rotations at the Royal Veterinary College, all students are required to complete a research project over a period of 8 weeks. I opted to go abroad and with the help of the charities the Donkey Sanctuary (DS) and the International League for the Protection of Horses (ILPH), I arranged to visit their project site in Mexico. I was based in Mexico City for 5 weeks from March-April 2007 and worked with each of the three mobile veterinary units that are staffed with a vet, their assistant, a farrier and often students from the National Autonomous University of Mexico (UNAM). The DS and ILPH, together with the UNAM, have worked in Mexico for the last 16 years. They work within 10 of the 32 states dealing with more than 15,000 equids (horses, mules and donkeys) annually, providing free veterinary care. I accompanied the veterinary teams on their visits to villages, including sites in 6 different states, where it had been previously arranged that owners would bring their animals for treatment. Animals may be presented with particular problems or simply brought to receive a wormer. Horses and donkeys receive additional vitamins. At the moment only recordings of age and Body Condition Score (BCS) are made on the animals receiving treatment. In addition to veterinary treatment, lectures are given to both children and adults explaining the basic care that animals require to be of working fitness. Explanations are given as to why an animal in good condition will work more effectively and hence improve the family's standard of living.

Working equids are essential for many people throughout the world. They have a wide variety of roles, including providing transport for people and goods, as well as being used within agricultural systems for tillage, seeding and weeding of crops, therefore the importance of having a healthy, fit animal is high. In Mexico, motor-power is increasing, however for the poorest people this is not affordable or practical- they tend to own small plots of non-irrigated land. Animal power is widely available and is generally within economic reach of rural communities. In some areas, horses may be kept as a sign of status or wealth.

The world population of equines has been estimated to include 41 million donkeys, 15 million mules and 65 million horses, and yet there is a relative lack of literature published on the subject of working equines, and none that I have found quantifying their welfare status in any region of the world. I conducted a study into the welfare of working equids using a protocol designed by J.C. Pritchard et al based on direct observation. I recorded observations of health and behaviour then analysed the results to see whether there were differences in the factors affecting welfare in the three species, caused by their different roles in society. The protocol involved 5 descriptors: date, location, species, sex, age - I estimated the ages of the animals on observation of their incisors, followed by 25 observations of health and behaviour. Body condition was scored on a scale of 1 (emaciated) to 9

(obese). The locations of lesions were recorded on an outline drawing. Other observations were either present or absent; and included lameness, tether/hobble lesions or scars, abnormal hoof horn quality – the presence of cracks, missing sections of hoof wall etc, abnormalities of hoof wall length and eye abnormalities. Gait abnormality was assessed by observing the animal walk away for a distance of approximately 10m. I used the following observations to assess behavioural status of the animal - to assess the reaction to humans, the animal was approached at a 45° angle from a distance of 3-5m, I then walked down one side of the animal at a distance of 30cm, turned at the tail and walked back towards the head on the other side of the animal.

The animals in my study had an age range of 6 months to 20 years although the majority were aged between 5 and 15 years, and within this age group, almost 45% of animals presented with lesions. The great majority of animals appeared alert, opposed to apathetic or severely depressed. When approached 50% showed avoidance behaviour. 74% of the equids had a BCS of 4 or less so could be described as being in a less than moderate to emaciated condition. Long hoof walls had a high prevalence in all species, but especially in mules with 92% of all animals presenting with this problem. Spinal lesions were common in donkeys, most likely because of the use of unsuitable harnesses, combined with excessive loads, and a lack of recuperation time to allow healing once lesions had occurred. Gait abnormalities ranging from mild to severe presented in almost half of equids. Although there were some significant differences ($P < 0.05$) between the different species: BCS, hock lesions/scars, swelling of tendons/joints, hoof wall length and quality, cow hocked conformation and gait abnormality, many factors affected the three species equally.

Welfare is a complex subject that is difficult to define. It is an increasingly important issue to the public in the western world, although in less developed countries, people still have to be convinced of the value of welfare. Owners are often unable to see the causes of poor welfare, preferring to attribute the behaviour to an anthropomorphic analogy, such as laziness. Social, economic, religious and cultural differences between societies must be recognised when considering welfare, but the pursuit of humane care and treatment of animals should be sought by the international community and through the work of international charities, realised. In the context of this study I felt that good welfare related to an animal that was fit for its purpose, both physically and psychologically. I had hoped to be able to quantify welfare in Mexico but my study size of only 139 animals proved to be too small. My results are likely to have underestimated the size and severity of welfare problems in Mexico as I only visited areas already being serviced by veterinary teams, in the future larger scale studies would be needed, including non-project areas, to accurately assess welfare standards. Education is vital for improving the welfare of working equids, and I feel it deserves greater emphasis.

The work of international equine based charities such as the Donkey Sanctuary, the Brooke and SPANA is increasing. By using a detailed welfare assessment protocol, the success of veterinary intervention can be recorded, and treatment focused at the most important factors detrimental to welfare, once identified. As the DS-ILPH-UNAM increases the number of areas it works in within Mexico, it would be useful to perform a similar study to the one I have conducted at the initial stage, then at designated intervals, to see if the welfare of animals is improving and whether the treatment provided is being successful. Welfare standards are below ideal in Mexico with many animals presented malnourished, lame and with lesions, however, some areas that I visited had considerably fewer problems than others, giving hope that all areas in time may improve.