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Supporting Ethiopia's Donkeys: Prevalence, sites and severity of wounds on donkeys presenting to markets in northern Ethiopia

Citation for published version:

Muir, C 2013, 'Supporting Ethiopia's Donkeys: Prevalence, sites and severity of wounds on donkeys presenting to markets in northern Ethiopia' *Veterinary Times*.

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Document Version:

Peer reviewed version

Published In:

Veterinary Times

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I HAVE always wanted to use my veterinary skills to aid development work overseas, so when I was offered the opportunity to travel to Ethiopia as part of the Donkey Sanctuary student scholarship scheme it seemed perfect.

The Donkey Sanctuary posted me to Mekelle, the capital of Tigray province in northern Ethiopia, which is a rapidly developing university city of 200,000 people. I was to join a team of three, a vet (Hagos) and two animal health assistants (Nugos and Gabrielle), who had been working together for four years. I was to help them, but also research the welfare of donkeys used to transport firewood into Mekelle.

Firewood is the main fuel in Ethiopia and people in the city rely on the transport of firewood from the surrounding regions to enable them to cook and heat their homes. The main firewood market days are held in Mekelle on Saturday and Sunday mornings and approximately 5,000 donkeys, some travelling four hours in each direction, are estimated to transport firewood each week.

Firewood is sold to dealers in the wood markets for a price around 6p a kilo, depending on its quality. The average load transported by a donkey weighs 90kg, a considerable burden on a donkey that typically weighs 120kg. Donkeys are frequently seen to be overburdened and occasionally collapse in the road on the journey to market.

The Donkey Sanctuary team runs a mobile unit to provide veterinary care to donkeys in the area, and to advise on aspects of management, correct harness use and other factors affecting welfare.

The most frequent presentations to the clinic are respiratory disease, wounds along the spine and gastrointestinal parasites. A smaller percentage of cases are dental problems, external parasites, hyena bite wounds, lameness and babesia and there are sporadic cases of colic, strangles, sarcoids and hoof problems.

The most common reason for owners to bring their animals for treatment is because they believe them to be suffering from “asso”. This syndrome encompasses all or some of the clinical signs of coughing, abdominal respiration, nasal discharge, head shaking, lacrimation, depression, weakness and inappetence. Cases presented to the clinic with “asso” have often immediately started work following a change in ownership. Owners are often reluctant to rest their donkey despite deterioration of the animal’s condition.

Rewarding

The high volume and diversity of cases at the mobile clinics enabled me to rapidly develop my practical skills. Given the limited resources and the language barrier, I relied on my clinical judgement, based on findings from physical examination, to reach a diagnosis rapidly and under pressure from a crowd of expectant owners. I

was sometimes frustrated by not being able to communicate, however, it was extremely rewarding to work with owners to clean and manage the wounds of a donkey.

Given the high prevalence of wounds at the clinics, I decided to focus my project on donkey welfare to identify the most common causes and sites of wounds on donkeys. Assessment was made of 127 donkeys in the markets to identify the prevalence, sites and severity of wounds. The causes and owner perception of wounds on donkeys were identified by two focus group discussions with owners. During the discussions, owners were asked to rank causes of wounds in order of importance and to assign significance to causes by distributing 100 pebbles between the suggested causes of wounds. This strategy was useful in engaging owners in debate and typically the sessions lasted for several hours.

For the direct assessment, donkeys were randomly selected from the groups in which they arrived to the market, by placing shuffled number cards (ranked 1-15) face down on each harness of the donkeys. Multiples of three were selected from each group for examination. The harness of each donkey was judged and graded as poor, satisfactory or excellent, based on the harness material, condition, weight and condition of the crupper strap.

The most worrying finding from the direct assessment was that only one donkey was found to have no wounds. The highest number of wounds on a donkey was seven, which was observed on five donkeys, and the median number of wounds was 3.6. Owners do not believe wounds significantly reduce the work capabilities of their donkeys and estimated the prevalence of wounds on donkeys to be 50 per cent to 75 per cent. This is vastly different to the direct assessment that demonstrated 99 per cent of donkeys to have wounds.

The most common (91 per cent) and the most severe wounds were on the crouper, with 55 per cent of crouper wounds cutting through to muscle tissue. This is perhaps no surprise as crouper straps are typically made of tyre material and, in this study, 40 per cent of crouper straps had no covering and 51 per cent were observed to have only minimal covering. Owners do not think crouper wounds cause the donkey pain because this area is not under pressure when the donkey is loaded. Back sores were the second most common wounds, with 74 per cent of donkeys injured.

Evaluation of saddles graded 36 per cent as poor and this high number may contribute to the high incidence of wounds observed in the direct assessment. However, the average number of wounds on a donkey for poor quality saddles was 3.5, for satisfactory saddles it was 3.8 and for excellent saddles it was 3.4.

Extrapolating from this basic analysis it is suggested little correlation exists between saddle condition, as graded in this study, and the number of wounds on a

donkey. This may suggest loading problems, such as overloading, slippage of the saddle and unbalanced loading, are more significant in the development of wounds than saddle condition.

In the group discussions, owners ranked the most common wound sites as the back, withers and tuber coxae. Hyena bite wounds were not observed in the direct assessment, which may reflect the loss of use of injured animals. Owners identified wound causes to be poorly fitting frames, overloading, unbalanced loading, hyena bites, donkey bites, tethering, beating and external parasites (such as habronemiasis or mange).

Owners also discussed the change of prevalence of wounds throughout the year – important when planning intervention strategies. Wounds are most common during the dry season, when people are unable to work on the farm and so earn a living by selling firewood. Hyena bite wounds are most common during the wet season, as the hyena finds it difficult to find food during this period. Immediately after the wet season, an increase in wounds associated with both external and internal parasites is observed.

Education

During the focus group discussions, wounds were only mentioned as a constraint of working donkeys after much prompting and it became apparent to me that wounds are regarded as normal by owners.

The study identified the main causes of wounds to be loading and saddle/strap problems. However, this is a difficult issue to resolve as owners are reluctant to reduce the load or to rest an injured donkey because they need to work the donkey to survive. It is therefore crucial owners receive education to enable them to understand correct saddle and strap design and that the long-term benefits of correct loading to prolong a donkey's working lifespan, rather than overloading for short-term economic gain, are justified to those working with donkeys.

Over the past two years, the Donkey Sanctuary has shifted the emphasis of its strategy from providing veterinary care to educating the community to improve donkey welfare. Educating children is an important part of the Donkey Sanctuary's policy as it is not only a long-term solution to improve donkey welfare, but children also often have a powerful influence over their elders. Nugos teaches a class about donkey welfare to children aged 12 in 10 schools in the region and aims to visit each school every month. Each school has a donkey club, which children from eight years old can join.

One donkey owner described his donkey as the “queen of his household”, as his children are active members of a donkey club and hold their animal in high esteem.

The Donkey Sanctuary also has links with Mekelle University and each year four students complete a project with the Donkey Sanctuary team.

The team is very active in promoting the use of well designed saddles and trained 13 people to make harnesses while subsidising the cost of materials. However, three years after the training only three harness makers are still working, despite the high demand. The reasons for dropping out are that those employed have found it easier to make more money elsewhere, the task of stitching is strenuous and the job is viewed as lowly by the community.

My visit coincided with World Animal Week, during which the Donkey Sanctuary team helped organise events to promote animal welfare. On one day, about 100 horses and 100 donkeys were run along the main street in Mekelle, with banners carrying the slogans

“Don’t beat me,” “Don’t overload me”, “I need rest”. This gave a strong visual message to the community to promote animal welfare. On two days, free veterinary care was provided for all species and talks about animal welfare were given to owners before treatment.

I thoroughly enjoyed working with the donkeys and their owners, although the work of the team in Mekelle seems overwhelming. The student scholarship gave me a unique opportunity to work in a country where the conflict between animal welfare and economics could not be more apparent. Certainly, the majority of cases presenting to clinic could have been prevented by better husbandry.

My experience has highlighted the importance of both veterinary support and community education and I am extremely grateful for the memories and experience.