

The year of the maggots

The Gambia Horse and Donkey Trust now offer their services to small animals as well as working equines. Over the past year, the charity has experienced an influx of cases with severely maggot-infested wounds, something that has never previously been seen in more than 20 years of operations. This brings new challenges to the charity and creates an opportunity for future research with the likelihood of this being an emerging animal and public health concern.

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While, at first glance, it might seem strange to be reading an article about a horse and donkey charity in a companion animal journal, the remit of the Gambia Horse and Donkey Trust has widened considerably in recent years (*Box 1*). Gone are the days where we provide care, rehabilitation and sanctuary only for equines; as a result of other animal charities in the Gambia closing down, the welfare situation for dogs and cats started to deteriorate with no other organisation available to offer their services. At the Gambia Horse and Donkey Trust, we have a strong ethos of valuing all lives, and when we started to see the suffering that some of the companion species were experiencing, we felt we had no other choice than to step in and help where we could. As a result, our charitable objectives have changed to improve the welfare of any animal in the Gambia, which is no mean feat. It means that we now have a busy veterinary centre in Makasutu Forest where, as well as providing care and treatment for many equines, we also do the same for over 100 dogs, around 70 cats and we have even offered our support to monkeys, camels, civet cats and a turtle. Our primary centre is based in Makasutu Forest in the Gambia down a long, dusty, sandy road which can become almost impassable at certain times of the year. Among the trees is a large building which houses a training room downstairs and volunteer accommodation upstairs; as you approach through the main gates, there are animals everywhere. There are dogs playing together or curled up tightly, sleeping in the little sand bowls that they have dug for themselves. To the left you see camels and cows, to the right are paddocks full of horses and donkeys, and everywhere you look you

will see members of our Gambian team busy with feeding, grooming, bandaging, dressing and treating the animals on site.

The majority of the companion animals that come into our care are street dogs and cats. However, we also offer veterinary services to Gambian-owned animals whose owners would be unable to afford private veterinary treatment. New patients are brought to our centre on a daily basis with a range of diseases and injuries. We see a high number of tetanus cases in dogs, as well as distemper, parvovirus and more suspected rabies cases than we would like. Injuries are often severe with a high prevalence of road traffic accidents, machete wounds, collars that have been left to embed since the dogs were puppies and broken limbs.

At the Gambia Horse and Donkey Trust headquarters, 2023 has been renamed the 'year of the maggots' because of an influx of severe wounds filled with flesh-eating maggots (*Figure 1a*). This is something that we have never previously experienced on this scale, and it has pushed our team and our resources to their limits. Every day, several more dogs with maggot-filled wounds would be brought to us and we have been close to breaking point. While many maggot species will eat only necrotic tissue, these maggots are different – they attack very healthy tissue and are literally eating the animals from the inside out when they enter a wound. Some of these animals have been so severely affected that they have had to be euthanised on welfare grounds, but thanks to the devotion of our team, many lives have been saved (*Figure 2b*). In less than 12 months, we have admitted more than 130 dog cases with this problem. Life in the Gambia Horse and Donkey Trust team – as staff or a volunteer – is not easy and definitely not for the faint hearted.

Often, people would turn up at the gates with these dogs late into the evening and, after an already very busy day, our team would continue to work for many hours into the night to get these animals comfortable, cleaned and dressed.

In February 2024, a report was produced for the Food and Agriculture Organization in Senegal detailing cases of animals with very similar wounds to those that we were seeing an influx of. In Senegal, it has been identified that the cause was New World Screwworm (*Cochliomyia hominivorax*). Wounds attract the female flies which lay eggs, the larvae then develop within 24 hours and feed on the living flesh of the host animal. Even small wounds can attract these flies and the larvae develop rapidly, causing significant harm. It is common for dogs to develop small sores on their ears, particularly during the rainy season because they rub their ears as a result of tick infestations. Many of the wounds we have been presented with appear to have started around the ears but have often been expanded considerably by the larvae, spreading across the whole of the dog's head, sometimes even exposing bone and other internal structures. The Food and Agriculture Organization report states that New World Screwworms have never previously been reported in West Africa, but it represents a major health and economic threat to the region and is a significant animal welfare concern. While it has not yet been confirmed that this is what the cases that we have seen are, the Gambia is completely surrounded by Senegal so if there is an infestation of New World Screwworms there, it is almost certainly also in the Gambia. The cases that we have seen would also support this, particularly as this is not something we have ever experienced previ-

ously in more than 20 years of operations. We are always willing and eager to collaborate with any researchers who may be interested in investigating emerging themes such as this one, especially when it poses such a significant risk to both animal and human health.

Medical supplies and medications are not always easy to source in the Gambia – there are often shortages or periods where we are unable to buy certain essential medications. This influx of extreme cases meant we have used huge amounts of medications, not to mention bandaging materials. Bandaging materials such as Vetwrap and Sofban are rarely found in the Gambia and, despite kind supporters often donating these vital supplies to us, we were getting through these donations faster than they were coming in. Our dedicated team of Gambian staff and international veterinary volunteers have had to be very creative in using whatever materials they have to hand to bandage some of the most awkwardly positioned wounds, keenly awaiting delivery of the next batch of donated materials.

We have a strong Gambian team who do a sterling job of going above and beyond for animals in the Gambia, but we also rely on visiting volunteer vets and vet nurses. Unfortunately, we do not have a resident veterinary surgeon on site, so any surgeries are impossible without a visiting vet. We highly value all volunteers who choose to give up their spare time to support us in our work and there are many things we simply could not do without the generous support of these wonderful individuals.

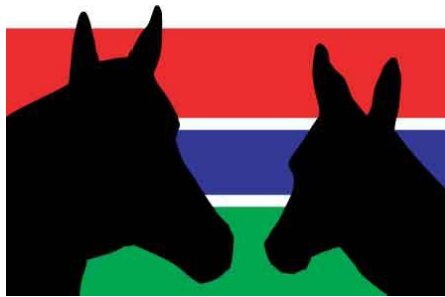


Figure 1. A dog with severe ear wound, causing a complete loss of the outer ear, before and during treatment at the Gambia Horse and Donkey Trust. This is one of many cases believed to have been caused by New World Screwworm.

Working in a very poor African country can be fraught with challenges. From food shortages to fuel shortages and constant vehicle problems as a result of the dreadful road conditions and intense work that our vehicles are required to do. We have had lightning strikes on our buildings, flooding in the rainy season and outbreaks of various tropical dis-

eases – many of which are not treatable and some of which we are unable to even diagnose. Sourcing the medications that we need for the animals in our care is a constant struggle; certain drugs often become unavailable in the country and we have to simply make do with what we have. As a result of the new Royal College of Veterinary Surgeons regulations that were introduced in 2023, it is now impossible for visiting vets to bring donations of prescription-only medicines, making it even more difficult for us to source many medications, including basics such as flea, tick and worm treatments which are vital for the health of the animals in our care. Some days, the problems can seem insurmountable, but we have a team who always continue to work regardless, driven by a strong motivation to improve animal welfare in the Gambia. The ripples of change are spreading with many paravets who trained with us being posted at different locations throughout the country, meaning that more animals, even in very remote areas, have access to veterinary nursing support. We have a strong organisational ethos of there being ‘no problems, only solutions’ – that ethos alone is what has enabled us to complete our work for more than 20 years, helping countless animals and their owners along the way.

If you are a veterinary professional who would like to volunteer your services to help with our work, we would be delighted to hear from you. Please contact us at ghdt@gambia-horseanddonkey.org.uk

Box 1. Information about the Gambia Horse and Donkey Trust

The Gambia Horse and Donkey Trust is a small UK registered charity, founded in 2002 by sisters Heather Armstrong and Stella Brewer. The aim of the Gambia Horse and Donkey Trust is to reduce rural poverty in the Gambia by improving the health and productivity of working equines and improving the welfare of all animals through the provision of education and veterinary services. With no tradition of horsemanship in the Gambia and a combination of poor management, high disease risk and poverty, farmers were investing relatively large amounts of money for a working animal only for it to die, too often within 6 months. Not only was this causing further hardship for the farmers, it was also creating a serious animal welfare problem and the veterinary services did not have the infrastructure or finances to be able to help the farmers. In recent years, companion animals began suffering as a result of the closure of several small animal charities, leaving nowhere for them to go for help and no one offering vaccination or neutering at affordable prices for local people. The Gambia Horse and Donkey Trust has widened their remit to provide the much-needed support for these animals too.