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Unsung Equine Heroes: An Analysis of Equine Care and Management During the Great War

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A thesis submitted in partial fulfillment of the requirements for the Master of Arts degree in History

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Abstract

This thesis explores the use of equines by the British Expeditionary Forces throughout the First World War, particularly examining various aspects of war equine care and management. It addresses the significance behind the use of these animals in the war before delving into the reality of how equines were cared for in terms of farrier work, skin care and management, feeding and watering, as well as psychological understandings of horses, donkeys, and mules. Through the implementation of various primary and secondary source materials, this thesis considers care mistakes that were made and the corrections that were enforced to alleviate injury and illness resulting from such errors in judgement. It further analyzes the reality behind emphasis placed on such shifts, arguing that changes were primarily prioritized not because equines were living beings that deserved as much but because they were so vital to the war effort.

Keywords

First World War

Allied Countries

War Equines

Farriery

Military

Veterinary

Animal Psychology

Animal History

Cavalry

Transportation

Summary for Lay Audience

Much research has been conducted on medicine and health as it was seen throughout the duration of the First World War. However, most of the work done in this area of war history has centered on human medicine and how this particular conflict shaped how men and women were treated for various injuries and illnesses. Comparatively little has been said of veterinary medicine and the use of horses, donkeys, and mules throughout the same period. Equines were of immense importance to the Allied nations involved in this war and were heavily relied upon for transportation purposes, taking on the brunt of the work associated with moving men and supplies to and from the frontlines. With their significance in mind, attention had to be turned towards the care and management of these animals in order to limit the loss of such vital creatures.

This research project considers the use of equines in the First World War to better examine the state of their care at the beginning of the war, the shifts that were made to correct early errors which had resulted in a spike in equine mortality cases, as well as the true reality behind why such shifts in care were emphasized and prioritized. Through the use of primary and secondary source materials, including veterinary diaries and records from the war, this thesis argues that changes made in equine care and management throughout this period were emphasized due to the fact that horses, donkeys, and mules were important to the BEF war effort and therefore needed to be preserved and protected not because they were living beings that deserved as much but rather because they were so vital in the movement of troops and supplies at the Western Front. In doing so, this project aims to create awareness of the use of horses in warfare and fill vital gaps in war history surrounding this subject.

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A special dedication goes out to my grandfather, Wasyl Wasko. From surviving the Holodomor to experiencing true evil within the walls of Dachau Concentration Camp, his story has always lived deep within me. Everything he went through and all of the pain he endured never stopped him from coming to Canada and creating a name and a life for both himself and his family. His story is what made me fall in love with history and develop a desire to learn more about stories of the past to never forget hardships, but also to emphasize how important it is to continue to learn, evolve, and grow. Without his love and support, this project would have been an impossible feat. You were truly one of the most incredible people I have ever had the fortune of knowing and you are so dearly missed. I hope that I have done you proud.

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Introduction

Horses have long been associated with war, with the earliest evidence of animals of the equine family being used in warfare dating back to Eurasia sometime between 4000 and 3000 BCE.¹ From that point onward, history has witnessed stories of horse-drawn chariots pulling soldiers into battle and cavalry riders charging bravely into direct combat on their galloping steeds. When war is imagined, the war horse is not far behind and images of these brave animals are easy to find. Since ancient times, horses have been the silent partners of soldiers in war and have even come to shape how war is fought.² As horses were traditionally the ancient and medieval equivalent of airplanes and tanks, in being so essential to any nation's war effort, there is little wonder why horses dominate war memory as dramatically as they do. They were recognized by army officials for being the "single most important instrument of war" for several thousands of years, at least from a transportation perspective.³

In the years between 1600 and 1350 BCE, horse drawn chariots were extensively utilized by soldiers headed into war throughout the area that is known as the Middle East today.⁴ Horses were bred for the particular purpose of pulling these chariots into conflict, encouraging a good stock of equines who were fast but also strong enough to pull their carts and the men onboard. As the years wore on, horses came to occupy a different role in warfare, one that would continue for centuries. As chariots grew increasingly inconvenient due to the fact that they were cumbersome and had difficulty traversing rougher terrain, soldiers came to rely on horses for cavalry purposes, riding aboard the animals and charging courageously into war. As early as 360

¹ Stephen Wynn & Tanya Wynn, *Animals in the Great War* (Pen & Sword Books Limited, 2019), ix.

² Catharine R. Franklin, review of *War Horse: A History of the Military and Horse Rider*, by Louis A. DiMarco, *The Journal of Military History* 73, no. 2 (April 2009): 624-625.

³ J. Edward Chamberlin, *Horse: How the Horse Has Shaped Civilizations* (Toronto: Vintage Canada, 2007), 136-137.

⁴ Stephen Wynn & Tanya Wynn, *Animals in the Great War* (Pen & Sword Books Limited, 2019), ix.

BCE cavalry units were used, as evidenced by records of experiences with them written by a Greek cavalry officer named Xenophon during this period.⁵ Moving into medieval times, even greater emphasis came to be placed on equines used for cavalry purposes, and sturdier horses that could sufficiently carry a knight and all of his armour into battle were bred.⁶ With the development of gunpowder and guns which made horses increasingly vulnerable and therefore minimized the effectiveness of mounted forces, there existed a sentiment that perhaps these animals would not play as significant a role in warfare as they had for so long but this was not the case. Even with these developments, men continued to ride horses into battle and frequently desired to fight like their ancestors had done so many years before, often continuing to use longbows and other more traditional weaponry whenever possible. Cavalry charges and mounted formations continued to be a mainstay in warfare for a very long time, playing important roles in countless wars well before 1914, including the Crimean War and the Franco-Prussian War which saw 96,000 men riding into the field on horseback.⁷

So, horses have long played vital roles in warfare well before the First World War. Typically used in cavalry pursuits, these animals were frequently seen in combat and it was commonly assumed that they would continue to fill such roles in the First World War. In fact, thousands of horses were sent overseas from Canada alone early in the war to serve in cavalry units and “every major army had a substantial cavalry at the start of the war,”⁸ including the Russian army, which had over 200,000 soldier-horse partnerships ready to be deployed throughout the war.⁹ Despite the fact that some felt that mounted soldiers were becoming

⁵ Ibid, ix.

⁶ J. Edward Chamberlin, *Horse: How the Horse Has Shaped Civilizations* (Toronto: Vintage Canada, 2007), 147.

⁷ Ibid, 172.

⁸ Alan Taylor, “World War I in Photos: Animals at War”, *The Atlantic* (April 27, 2014)

<https://www.theatlantic.com/photo/2014/04/world-war-i-in-photos-animals-at-war/507320>.

⁹ J. Edward Chamberlin, *Horse: How the Horse Has Shaped Civilizations* (Toronto: Vintage Canada, 2007), 173.

obsolete, due to the fact that a large number of senior officers on all sides had “started out as cavalry officers in the initial years of their military service,” cavalry would continue to be emphasized particularly in the beginning of the war, when cavalry units on both sides had great success in battle.¹⁰ Cavalry units, even when not used on a regular basis, were kept in reserve throughout the war with the intention that they could be used if the infantry was able to break through enemy lines. These mounted groups won several impressive victories, distinguishing themselves through bravery and resilience. The Canadian Cavalry Brigade, which was part of the British Cavalry Corps, came to be just one of the mounted units acknowledged for its contributions to the war effort, recognized by figures like Lieutenant-Colonel D.S. Tamblyn, a true animal lover who served as a North West Mounted Policeman prior to the war and who was well-recognized for his affection towards animals during his time with the 1st Canadian Mounted Rifles throughout the First World War. He noted their “gallant deeds” which went “down in history as some of the greatest achievements ever performed by mounted groups in the Great War.”¹¹

While perhaps they were not as powerful or useful as they had been in centuries prior, cavalry charges that took place throughout the war still had great effect. As early in the war as August 22, 1914, horseback units associated with the British Expeditionary Force were able to prove their worth. On that day, the C squadron of the 4th (Royal Irish) Dragoon Guards was tasked with protecting the road connecting Mons with Soignies, the neighbouring town, which was near the village of Casteau. The group came across four German Lancers of the 4th Cuirassiers, part of the German 9th Cavalry Division who were advancing on Mons. They

¹⁰ Stephen Wynn & Tanya Wynn, *Animals in the Great War* (Pen & Sword Books Limited, 2019), ix.

¹¹ Lieutenant-Colonel D.S. Tamblyn, *“The Horse in War” and Famous Canadian War Horses* (Kingston: Jackson Press, 1920), p. 41.

retreated but the BEF troops pursued them. At 6:20am, Drummer Earnest Edward Thomas, serving with the 4th, dismounted from his horse and commenced firing. One of his rounds struck and wounded a German soldier, resulting in Thomas being credited with having fired the first British shot of the war, thereby demonstrating the significance of cavalry units.¹²

Even later in the war, cavalry had a role to play. On July 14th, 1916, in the cornfields of High Wood, a cavalry charge took place involving elements of the 20th Deccan Horse of the Indian Cavalry and the 7th Dragoon Guards of the British Army, representing the first cavalry charge by an Allied unit since the late summer of 1914 when trench warfare began to be used in this war.¹³ Later still, during the Hundred Days' offensive from August 8th until November 11th, 1918, there was what has been recognized as the last cavalry charge of the war. There was a skirmish between Belgian and German troops between the Belgian town of Oedelem and near the municipality of Maldegem. By this point in the war, the Belgian Cavalry Division was stationed on the Western Front but was being used in an infantry capacity, whilst its horses were "kept back from the immediate front line and used for supply purposes."¹⁴ With Belgian forces advancing on this area, the Germans attempted to flee. A cavalry division was ordered to mount and chase but later had to dismount and fight as infantry. Through a series of dismounted and mounted efforts, the Belgians were able to push the Germans back and reclaim the territory that had been lost earlier in the war. Without the use of cavalry divisions in this fashion, the Germans would have been less likely to abandon their hold on the area and victory may not have been achieved. During the war, "all but one of the thirty-two regular army cavalry regiments saw action either in battles or fighting on the Western Front."¹⁵ In many ways, the cavalry influence

¹² Stephen Wynn & Tanya Wynn, *Animals in the Great War* (Pen & Sword Books Limited, 2019), 23.

¹³ *Ibid*, 25.

¹⁴ *Ibid*, 28.

¹⁵ *Ibid*, 26.

in the BEF armies was still very much alive throughout the war, and many of the officers who were once cavalymen remained loyal to the cause. Countless decorations for bravery were awarded to cavalymen, including eight who were awarded the Victoria Cross. Units like these fought aboard their horses, many of them dying alongside them; 5,600 BEF cavalymen were killed by the time the war drew to a close in November of 1918.¹⁶

Despite the early emphasis placed on cavalry and the relative success achieved by several of these units, the First World War saw the time of soldiers charging into battle on horseback as the mainstay of military tactics coming to an end. As the war progressed, cavalry units no longer had the same value in this conflict, and many of these units were disbanded, the men being transferred to the infantry and the horses being utilized for other purposes. The implementation of trench warfare essentially neutralized the effectiveness of cavalry units as horses could not traverse these complicated networks without risk of broken limbs or other serious injuries. Further, barbed wire, machine guns, and other wicked weapons of war that were increasingly advanced and brutal made horses progressively more vulnerable, further reducing their effectiveness. However, this did not spell the end of the use of horses in war during this period. Even though the notion of equines in war still conjured up images of cavalry charges at high speed, by this point warhorses came to be workhorses that “provided transport, traction, and, above all, mobility” for troops on both sides.¹⁷ While they were no longer effective in charging across no-man’s land situated between two opposing trenches, horses were still vital in ensuring movement behind these lines.

¹⁶ Ibid, 28.

¹⁷ Charles A. Caramello, “‘They Had No Choice:’ Images of Equines in the Great War”, *Anglistik: International Journal of English Studies* 29.2 (September 2018): p.73.

By 1914, the world was becoming increasingly mechanized and new inventions were having profound impacts on society. With the early 20th century being a period of rapid technological and social change, new machines such as trucks and other mechanized vehicles were being welcomed to the world stage. The Ford Model T automobile was released in 1913, becoming the first mass-produced automobile,¹⁸ and railways were rapidly replacing horse-drawn alternatives for long distance transport and haulage.¹⁹ Although horses were typically still being used in part for shorter journeys in the years leading up to 1914, it was clear that all countries and their attached armies were growing more “modern, mobile, and increasingly mechanized.”²⁰ While this rapid mechanization minimized reliance on equines, they remained prominent figures in both rural and urban centres during this period. Even early in the nineteenth century, cities still heavily depended on these animals “for internal freight movement, public transportation (until late in the century), private travel, and emergency services.” While horseback riding around cities came to be less common and while urbanites “were much more likely to view horses as machines than as fellow mammals,” they were still prevalent in most urban spaces at this point in time.²¹ For example, in the United States it was noted by the U.S. Census Office that nineteenth-century cities with populations over 100,000 averaged approximately one horse for every fifteen people. Even where this figure was lower, the total number of horses could be astronomical. In 1900, Manhattan alone employed 130,000 horses for urban industrial and transport work.²² Despite the fact that they were so prevalent in urban and

¹⁸ Stephen Wynn & Tanya Wynn, *Animals in the Great War* (Pen & Sword Books Limited, 2019), 31.

¹⁹ Jane Flynn, “Sense and sentimentality: a critical study of the influence of myth in portrayals of the soldier and horse during World War One”, *Conference on Critical Perspectives on Animals in Society* (University of Exeter, UK, 2012), p. 25.

²⁰ *Ibid*, 26.

²¹ Joel A. Tarr and Clay Mcshane, “The Horse as an Urban Technology”, *Journal of Urban Technology* 15:1 (2008): 6.

²² *Ibid*, 5.

rural spaces, poor treatment of horses was common. In the United States in the late 1800s, veterinarians noted that they often had to shoot horses because they had become injured and were deemed to be not worth saving by their owners. In fact, oftentimes horses were worked to death as owners found that they could easily replace the animals and could even profit from their demise, since rendering plants tended to “bid competitively for the right to pick up dead horses.”²³ Thus, although they were common, it needs to be noted that the care they were provided, particularly in urban areas, was often far from ideal in the decades leading up to the war. This is significant as many individuals would have carried these same attitudes towards horses with them into the military once war did commence.

Despite the continued prevalence of horses in rural and urban centres throughout the early 1900s, military planners initially anticipated that motorized transportation and traction would play a significant role in the coming conflict that was the Great War. Unfortunately, these technological and mechanized advances were doomed from the start. Because motorized vehicles were so new at the beginning of the war, they frequently fell victim to problems in the muck of the Western Front. These machines were entirely unprepared to deal with the weather conditions that wreaked havoc over frontlines and battlefields and they came to be unreliable for the purpose of moving troops and transporting supplies to and behind the front. Thus, alternative methods had to be embraced. With so many equines already being sent overseas for doomed cavalry purposes, BEF units turned to these more traditional means of mobility and movement. Given the fact that “the power of an army as a striking weapon depends on its mobility,” these animals thus became absolutely integral to the BEF war effort as a whole and victory came to

²³ Ibid, 13.

depend on equines.²⁴ The BEF had to become heavily reliant on old-fashioned horse power to fight this war, using animals to “transport heavy artillery, men, equipment, ammunitions, fuel, post, food, wounded soldiers, and basically anything else” that was needed to fight the war.²⁵



Figure 1: “Army Motor Car at Lark Hill, Salisbury, pulled by horses. [1915].”

Despite the fact that equine transport was incredibly time-consuming, it became absolutely essential to the functioning of all sides. It was even recognized by soldiers serving in veterinary units that mobile troops would have become “powerless, impotent,

incapable of advance or the execution of definite purpose” without the service of these animals.

Equine transport came to be a vital “cog in the colossal machinery of war that” had to be kept up to standard in order to “meet and perform gigantic tasks demanded” of the military.²⁶ Military strategists came to see that no mode of forward military transportation was as versatile as horses, which outnumbered motor vehicles seventeen to one at the Western Front. They were even used in major battles such as Ypres and Vimy, where conditions were so dismal that any other form of transportation would have quickly collapsed, therefore dooming the BEF units fighting.²⁷ Field

²⁴ Sir Douglas Haig, ‘note’ in Capt. Sidney Galtrey, *The Horse and the War* (London, Office of *Country Life*, 1918), p. 11.

²⁵ Stephen Wynn & Tanya Wynn, *Animals in the Great War* (Pen & Sword Books Limited, 2019), 31.

²⁶ “War Diaries - Assistant Director of Veterinary Services, Canadian Corps,” *Library and Archives Canada* RG9-III-D-3, Volume 5042 File 884, 1917, p.4.

²⁷ Tim Cook and Andrew Iarocci, “Animal Soldiers,” *Canada’s History* 93 no. 5 (October 2013), p. 20-27.

Marshal Sir Douglas Haig felt so strongly about the significance of the use of equines in this way that he revealed that he was all for using aeroplanes and tanks but felt that they were nothing more than mere accessories to the man and horse.²⁸ Despite the fact that this was an era of growing mechanization and technological development, horses and mules still provided the “overwhelming bulk of draught power in combat zones”²⁹ and hundreds of thousands of them still were employed on the Western Front, despite an early understanding by army officials that they would “no longer be needed on modern battlefields.”³⁰

Equines came to touch every aspect of the First World War effort, serving in vital roles carrying men, laying cables for telegraph communications, delivering ammunition and supplies to forward troops, and moving artillery pieces. Nothing moved during this war “that didn’t have a horse attached” and horses were “sacrosanct in the army.” They became the main source of energy in the Great War, therefore not only supporting the war effort but also entirely affecting the war’s outcome.³¹ As Field Marshal Haig observed, if “in March 1918, the equine force of Germany had been on the same scale and as efficient as the British equine force” then Germany likely would have “broken through the British and French lines” and changed the outcome of the war.³² Thus, in many ways these animals represented a marriage between modern and traditional means of transportation in war, and they came to be an “integral part of every land army’s

²⁸ Marguerite Helmers, “Fortunino Matania’s Goodbye, Old Man”, in *Portraits of Remembrance: Painting, Memory, and the First World War* edited by Margaret Hutchison and Steven Trout (Tuscaloosa: The University of Alabama Press, 2020), 213.

²⁹ Andrew McEwan, “‘Maintaining the Mobility of the Corps:’ Horses, Mules, and the Canadian Army Veterinary Corps in the Great War”, Doctoral Thesis, University of Calgary (2016), ii.

³⁰ Jane Flynn, “Sense and sentimentality: a critical study of the influence of myth in portrayals of the soldier and horse during World War One”, *Conference on Critical Perspectives on Animals in Society* (University of Exeter, UK, 2012), p. 26.

³¹ *Ibid*, 27.

³² Charles A. Caramello, “‘They Had No Choice:’ Images of Equines in the Great War”, *Anglistik: International Journal of English Studies* 29.2 (September 2018): p.73.

machinery” as well as part of the “landscape of the battlefield.”³³ Given that they were so vital to



Figure 2: “Horses carrying ammunition, c.1917.”

Zealand, India, South Africa and the United States. These animals were sorted into different categories: light draft, heavy draft, pack, and riding. This was conducted by Remount Departments of all armies - depending on their suitability - and from there were put to work.³⁴

Estimates of the number of horses and mules who served in the First World War vary from five to eight million, of which hundreds of thousands were killed or wounded during the war.³⁵ Canada alone supplied approximately 10%, or 130,000, of the horses used by Allied forces on the Western Front,³⁶ an effort made possible by the “considerable surplus” in equine

the war effort, countries went to great lengths to ensure sufficient numbers were supplied to the Western Front. Horses came to be sent to war from all over England and Europe as well as from Canada, Australia, New

³³ Jane Flynn, “Sense and sentimentality: a critical study of the influence of myth in portrayals of the soldier and horse during World War One”, *Conference on Critical Perspectives on Animals in Society* (University of Exeter, UK, 2012), p. 29.

³⁴ Marguerite Helmers, “Fortunino Matania’s Goodbye, Old Man”, in *Portraits of Remembrance: Painting, Memory, and the First World War* edited by Margaret Hutchison and Steven Trout (Tuscaloosa: The University of Alabama Press, 2020), 202.

³⁵ *Ibid*, 199.

³⁶ Fred Langan, “Morning Glory: Canada’s Own WW1 War Horse,” *CBC*, (November 10, 2012) <https://www.cbc.ca/news/canada/morning-glory-canada-s-own-wwi-war-horse-1.1259736>.

populations across the country at the time.³⁷ Further, between 1914 and 1918, 71,635 horses and mules served under the Canadian command, numbers that were matched and even exceeded by other armies during this period.³⁸ Thus, while technological warfare was making its debut, “conventional wisdom decreed” that these animals had to be provided in huge numbers and “had to be kept in good shape” for any hope of victory.³⁹ Since they were so essential to each country’s war effort, consideration had to be given to their care and management. Losing these animals on account of deadly mistakes born out of negligence was not only a shame but could be dangerous and detrimental to the soldiers themselves, and to the overall outcome of the war. Thus, efforts had to be made to support these animals.

Alongside the millions of horses used in the war, countless veterinarians were sent overseas to join units assigned to the care of BEF horses. In organizational terms, the Canadian Army Veterinary Corps is typical. Early in the war, Canadian veterinarians were sent overseas to assist with equine care for the horses of the Canadian and British Expeditionary Forces. All were trained in equine care but unfortunately their numbers were small. As demand increased for educated personnel to join the war effort and care for the numerous horses serving, Canadian veterinary schools permitted their students to skip their final exams if they enlisted in the British Army. Those who agreed to this arrangement were able to graduate automatically and could be given the rank of Second Lieutenant. This worked and, by the end of the war, veterinary personnel of the CEF alone included seventy-two officers and 756 other ranks.⁴⁰ Broken down into nine sections, each of which was assigned up to two officers and between six and twenty-

³⁷ Hon. Martin Burrell, *Production and Thrift: Agricultural War Book*, (Ottawa: March 1916), p. 95.

³⁸ Andrew McEwan, ““Maintaining the Mobility of the Corps:” Horses, Mules, and the Canadian Army Veterinary Corps in the Great War”, Doctoral Thesis, University of Calgary (2016), 3.

³⁹ G.J. Stortz, “A Canadian Veterinarian Overseas in the First World War”, *Can. Vet. J.* 23 (June 1982), 183.

⁴⁰ “Canadian Army Veterinary Corps, World War I”, *Wiki Tree*, Accessed August 28, 2022, https://www.wikitree.com/wiki/Space:Canadian_Army_Veterinary_Corps%2C_World_War_I

four other ranks, the CAVC had numerous hospitals, sections, and depots under their charge. For example, many Canadian veterinarians were sent to the No. 1 or No. 2 Canadian Veterinary Sections. These groups were responsible for providing animals with initial first aid and for moving equines with injuries or illnesses to evacuation stations. Here, the units worked to sort out where each animal needed to be sent on, based on the severity of their ailments. If the animals were deemed in need of more time-consuming and intensive care, they were sent to veterinarians at the No. 1 or No. 2 Canadian Veterinary Hospitals. These hospitals were designed to treat equines with severe injuries that could not receive sufficient care from veterinarians working with mobile sections given time, space, and equipment restraints. Specifically designed to perform surgeries and undertake treatment programs that were difficult and time-consuming, these units played important roles in ensuring that 24,000 horses, donkeys, and mules could be treated, 80% of which were noted to have been returned to active duty after their treatment was complete.⁴¹ Other BEF veterinary units adopted the same basic structure as the CAVC. Together, the men of these veterinary units helped to advance countless areas of equine care and management throughout the First World War. Significant areas where advancements were made included farriery, skin care, food and water supply, and mental understandings of these animals. For the most part, however, consideration of these various aspects of animal care was undertaken by the British Expeditionary Force not out of recognition that horses were living beings that deserved as much. Rather, these shifts were emphasized due to the fact that equines were so important to the overall war effort.

Despite that importance, Canadian historians have shown only limited interest in the subject. However, while the topic of equines in the First World War is a relatively unexplored

⁴¹ Ibid.

area of study, my project is certainly not the first of its kind. In recent years, there have been a number of studies of Canadian veterinary units and the use of these animals between 1914 and 1918. The first wave of accounts consisted of histories of units that relied on equines and the memoirs of those whose experiences centred on the animals. For example, Lieutenant-Colonel David A. Tamblyn released a short text in 1920 entitled “*The Horse in War*” and *Famous Canadian War Horses* describing his experience with the animals throughout the war and offering a general overview of the roles that horses played in the Great War. Through his own recollections, he addresses care afforded to these animals briefly as well as the roles that they played in specific battles like Passchendaele. Further, he briefly addresses the roles played by the Veterinary Corps and notes some famous Canadian war horses like General Sir Arthur Currie’s horse Brocklebank. Further information regarding the subject can be pulled from a variety of poetry collections, including in *The Blind Soldier and Other Poems* released in 1921 which featured a poem entitled “Martha” by John Locke Bradford discussing his favourite war horse. As useful as they are for background, these books were not written as rigorous history and did not attempt to meet the standards of modern scholarship.

It would be many years after the war before Canadian historians considered equines from a scholarly perspective. For example, Andrew McEwan completed his doctoral thesis on the subject of equines and veterinarians in the First World War in 2016, titling it “*Maintaining the Mobility of the Corps: Horses, Mules, and the Canadian Army Veterinary Corps in the Great War*.” This project has done an excellent job of raising awareness regarding this important subject and helps to set the scene in terms of how veterinary units operated and worked with the horses. Further secondary material such as the journal article “Animal Soldiers” published in *Canada’s History* by Tim Cook and Andrew Iarocci further explore the complex nature of the war horse

question, analyzing how the animals were used in the Great War context. These projects and many others like work diligently to raise awareness of this fascinating subject and are important in their own right. However, the vast majority of work conducted on First World War equines explore the subject from a military historian's perspective. Emphasis is often placed on how the horses were used at the front and how they benefitted the war effort. While interesting in its own right, there seemed to be a lack of information coming from an equine historian's perspective. For example, while it is important to explore how horses were transported overseas and the different objects they pulled, a full analysis of the intricacies of caring for horses and a thorough understanding of the complexities of working with the animals seemed to be largely absent. Further, as important as it is to explore veterinary units and their movement throughout the Great War, it is of equal value to explore how soldiers, officers, and families at the home front viewed the animals. Finally, secondary source material published surrounding this subject has traditionally been more inclined to talk favourably and perhaps uncritically of the efforts of veterinary units and troops with horses under their charge.

Having been an avid equestrian since I was just ten years old and having been involved in horse ownership since 2016, I am well-versed on the care and commitment that goes into offering these animals comfort and stability in their lives. Through experience dealing with veterinarians and farriers as well as with the implementation of independent research conducted on my own time in an effort to do whatever can be done to offer my own horse the best life I can, I have been exposed to what truly goes into working with horses. With this background in mind, this project allowed me to acknowledge the work that has been conducted by accomplished scholars in the past but also to expand on the vital research they completed to bring a different perspective to this area of study, the perspective of an equestrian. I was able to explore and

emphasize why horse care in the First World War was so challenging, and analyze the efforts made towards the betterment of the conditions for horses while still exploring the less-commonly addressed darker side of the subject, specifically the continuation of errors made to the detriment of the animals. While it is important to recognize the efforts made by veterinarians and officers towards attempting to afford the animals greater comfort and attention, this project seeks to expand on this positive story by addressing the fact that mistakes were made, sometimes knowingly, that resulted in the loss of many horses, donkeys, and mules. Thus, this project aims to acknowledge the work of historians in the past while also adding a different perspective on the topic to bring greater awareness and understanding of the situation for equines between 1914 and 1918.

Chapter 1: No Foot, No Horse; No Horse, No Battalion!

For equines serving with the BEF stationed at the Western Front throughout the First World War, conditions varied from far from ideal to dismal. When initially sent overseas from nations like Canada, Australia, and New Zealand, all equines joining the British forces were sent to Remount Depots where they were vetted and sorted into positions based on their size and capabilities. Some would be accepted as personal riding mounts for officers while others would be assigned the more tedious task of carrying men and supplies to the frontlines. While the care at these depots was typically of low quality, most equines temporarily housed there were granted access to barns, pastures, forage sheds and other facilities that offered them some degree of shelter and protection from severe weather. Unfortunately, on the battlefield there was often no time to build such complex structures.⁴² Instead, most horses, donkeys, and mules were assembled at a simple picket line where they spent most hours of the day standing until they were called into duty. A picket line as was used by British troops throughout the Great War entailed a rope which was stretched between two posts to which the animals would be tied at intervals.⁴³ Given the fact that the frontlines throughout the duration of the war were constantly subjected to intense bombardment and atrocious weather, it was incredibly difficult to find a dry patch of land on which to locate these picket lines. As a result, most equines were forced to stand in mud that reached their ankles and beyond for extended periods of time. Even when good footing was located, with so many animals needed for the total Allied war effort, picket lines rapidly got churned up by equine feet due to overcrowding. Footing became the “worst problem of picket lines” and, with the ground rapidly becoming a toxic mix of mud, urine, and manure,

⁴² “Care and Feeding”, *Brooke USA: Horse Heroes via The United States World War One Centennial Commission* (Accessed January 2022) <https://www.worldwar1centennial.org/index.php/care-and-feeding.html>.

⁴³ *Ibid.*

this quickly contributed to a rise in equine debility cases caused by foot and skin problems.⁴⁴

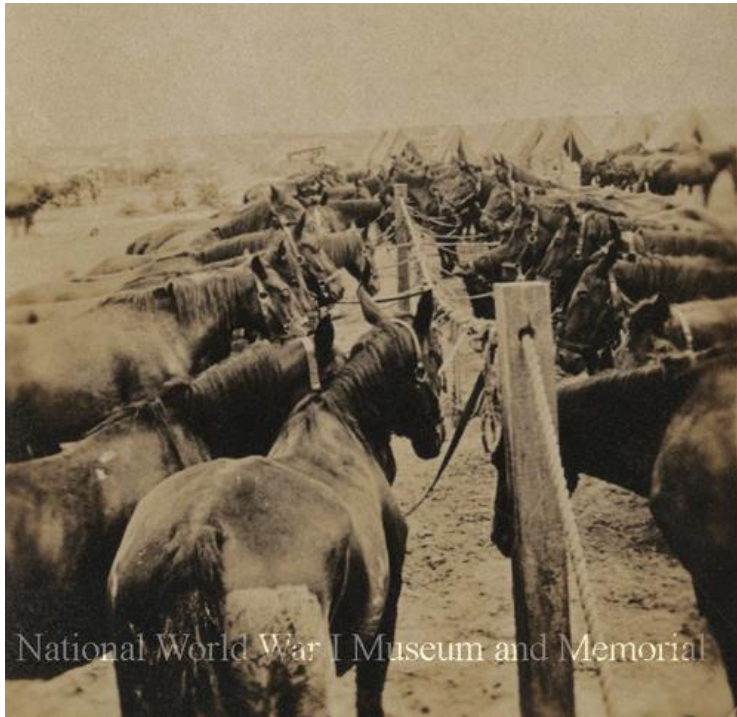


Figure 3: Horses picketed at the front in the First World War.

With countless equines needing to be cared for and with space limited, it was not uncommon to see hundreds of thousands of horses standing side by side. Not only was this concerning in terms of ground conditions but it also permitted the spread of disease and proved to be hazardous for horses that did not get along. Horses typically live in herds and within each grouping there is

always a leader. When a significant number of horses are forced together in tight quarters, it is not unusual for fighting to commence between them as they battle for control of each grouping. Thus, many of the animals were prone to kicking and biting, causing unnecessary injury to animals lower in the hierarchy. Further, given how overcrowded picket lines came to be, horses did not have a sufficient space to maneuver around in order to prevent their joints from stiffening up. While equines can and often do sleep standing up, they also tend to enjoy lying down on occasion in order to take the pressure off of their feet and joints. With such tight quarters, most of the animals were unable to do much more than shift from side to side.

Left out in the open, these animals were consistently exposed to the harsh elements prevalent during the war. Not only did they have to endure the frequent rain and snow with

⁴⁴ Ibid.

nothing separating them from such miserable conditions, but they were also forced to stand amongst falling debris and mud from exploding shells and bombs. Conditions for equines at the Western Front were so horrific as a result that, as one observer wrote, there was nothing “more distressing” to witness “than a concentration of transport animals, during wet seasons, in fields

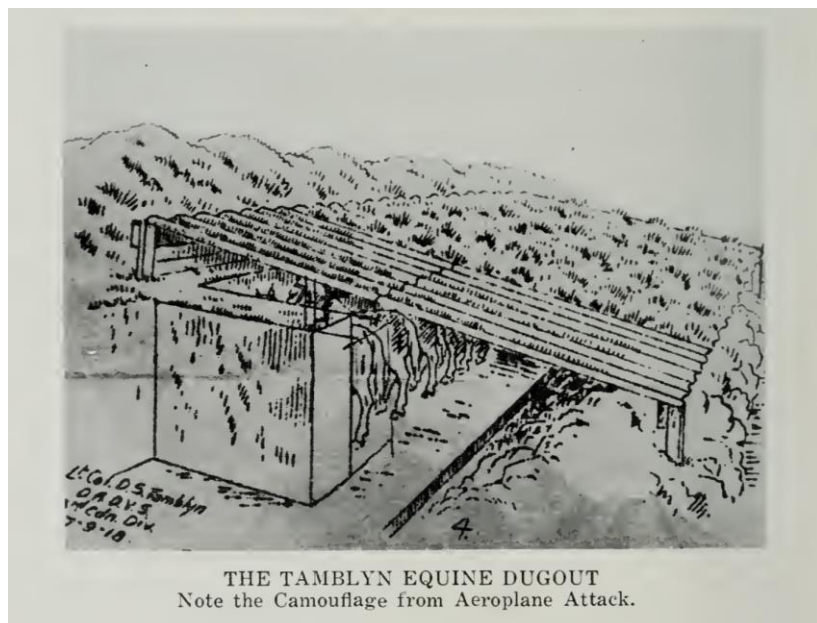


Figure 4: “Sketch of the Tamblyn Equine Dugout.”

were used. Sometimes, horses were tied against the side of a hill that had been dug out to form a straight front wall, into which the horses were faced, which offered them some shelter from the wind.⁴⁷ These acted in a similar fashion to stables in that they offered more protection than if the horses were left exposed on open lines.⁴⁸ Further, some troops found unused buildings that were not necessarily designed for animals but which had a roof, affording the poor animals some degree of protection from the weather. While this helped to reduce equine death and injury caused by the conditions at picket lines from which units had to attack, German troops came to

where mud was over their knees.”⁴⁵ Horses were often left wet and cold for months at a time and, under these conditions, some who were “propped up by the mud” died on their feet.⁴⁶ In an effort to improve this situation, occasionally makeshift quarters

⁴⁵ Lt. Col. D.S. Tamblyn, *The Horse in War and Famous Canadian War Horses* (Kingston: The Jackson Press, 1920), 21.

⁴⁶ *Ibid*, 21.

⁴⁷ “Care and Feeding”, *Brooke USA: Horse Heroes via The United States World War One Centennial Commission* (Accessed January 2022) <https://www.worldwar1centennial.org/index.php/care-and-feeding.html>.

⁴⁸ Lt. Col. D.S. Tamblyn, *The Horse in War and Famous Canadian War Horses* (Kingston: The Jackson Press, 1920), 19.

recognize the importance of such abandoned structures to the BEF war effort. As a result, before they retreated from an area, they often booby-trapped any unused buildings that might be used as stables by placing time bombs and concussion bombs within stable floors and stalls or at the entrances to these structures.⁴⁹ With this becoming common practice, BEF troops decided that it was not worth taking the risk on such buildings and so horses, donkeys, and mules continued to endure the dismal conditions at picket lines and in open corrals for the entirety of the war. An understanding of these horrific living quarters is essential in comprehending why so many equine lives were lost and why it came to be so vital to make changes in their care and maintenance during this period. This chapter will consider the area of farriery to analyze the state of the practice prior to the war as well as in the early years of fighting, the changes that were made to prevent loss of important horsepower, and the reality regarding the motivations behind such shifts in care.

The complex field of farriery and shoe-smithing was one of the countless areas of equine care that was advanced throughout the First World War in an effort to preserve important horse power for the BEF war effort. The practice certainly was not new, with Egyptians and Persians being credited with making the first horseshoes using a range of materials including woven grass and animal skins. Through the centuries, horseshoes began to be produced in different areas across the globe, coming in a range of shapes and sizes. In 400BC, for example, the Romans employed what would come to be termed as the “hipposandal”, iron soles that could be fastened to the feet of horses and mules using strips of leather in an effort to minimize hoof damage from harsh city roads.⁵⁰ It was not until much later that these sandal horseshoes were replaced by

⁴⁹ “Care and Feeding”, *Brooke USA: Horse Heroes via The United States World War One Centennial Commission* (Accessed January 2022) <https://www.worldwar1centennial.org/index.php/care-and-feeding.html>.

⁵⁰ James Pickford, “Crossrail Archeological Finds Go on View in London Museum”, *Finance Times* (February 2017): 1.

metal shoes secured with nails, similar to those commonly used during the Great War and up to present day. In fact, shoes with nails would first come to be known around 400AD and would not be widely used until after 1000AD.⁵¹ Throughout the following centuries, more and more knowledge was continuously spread in an effort to advance this field. Farrier books offering advice on how to properly shoe horses began to be published in the 16th century and individuals such as Henry Burden and Daniel Dodge worked tirelessly throughout the 1800s to develop a variety of machines to make farriery more efficient. These machines included the horseshoe making machine which was first patented on September 14, 1843 by Henry Burden and could produce a total of sixty horseshoes per minute, or about “fifty-one million horseshoes per year.”⁵² Daniel Dodge furthered equine shoe production advancements in 1874 when he patented the horse-nail producing machine which helped to speed up production of these essential tools of the trade.⁵³ Despite these profound advancements, it was not until much later that the field became professionalized. In 1912, changes were made to the Regulations and Standing Orders for the Canadian Permanent Army Veterinary Corps after harsh lessons had been learned in farriery throughout the Second Boer War. These changes ensured that Sergeant Farriers, who were then the senior non-commissioned officers in charge of animal care, were to be instructed properly on the fundamental principles of proper shoeing techniques.⁵⁴ Later still, it was not until 1975 with the Farrier’s Registration Act that shoeing of horses by unqualified persons in the United Kingdom was officially prohibited and the promotion of proper shoeing was encouraged.⁵⁵ Undoubtedly a field of slow progress, farrier work was still relatively primitive

⁵¹ Matt McMillan, “History of Horseshoeing”, *Sam Houston State University*, Slide 5.

⁵² Online Exhibit, *The Capital Region in 50 Objects: Burden Iron*, Albany Institute of History & Art, New York.

⁵³ Daniel Dodge, “Improvement in Machines for Finishing Horseshoe-Nails”, *United States Patent Office*, May 14, 1874, 1.

⁵⁴ Andrew McEwan, ““Maintaining the Mobility of the Corps:” Horses, Mules, and the Canadian Army Veterinary Corps in the Great War”, Doctoral Thesis, University of Calgary (2016), 103.

⁵⁵ Elizabeth II, *Farriers (Registration) Act 1975, Chapter 35* (London: Her Majesty’s Stationary Office, 1975), 1.

and not yet fully professionalized moving into the First World War. With conditions at the Western Front between 1914 and 1918 being so dismal, countless horses, mules, and donkeys were faced with hoof problems, some of which would ultimately lead to their demise. In an effort to limit unnecessary loss of equine numbers, improvements were made and enforced throughout the period in order to preserve equine life upon which the BEF so depended.

Nowadays, those involved in any degree of equine care are well versed on how critical it is to “routinely care for and properly manage” equine foot health.⁵⁶ Given the fact that equines are quadruped animals who distribute their weight evenly on four legs, their hooves are important structures that, while in appearance seem tough and hardy, are actually quite sensitive. Without proper care, unhealthy conditions can rapidly develop in the feet, contributing to injury and illness that can very well lead to loss of the animal if permitted to go on for too long without proper medical attention. As a result, tending to hooves on horses, donkeys, and mules has been recognized as a practice that belongs in the daily routine of these animals as much as feeding and watering.⁵⁷ Ideally, horse hooves should be picked out everyday, a process through which a pointed tool is used to take out all foreign objects from the underside of the hoof to ensure that stones and packed dirt are removed. This helps to ensure the minimization of stone bruising, abscesses, and thrush, a bacterial infection caused to the foot by continual exposure to wet and muddy conditions which can cause severe lameness and require “extensive treatment.” Beyond this, horse hooves should be trimmed and cared for by professional farriers every 5-12 weeks depending on the shoeing and working statuses of the animal.⁵⁸ This is to ensure that equine hooves are not permitted to grow too long, to ensure optimal comfort for the animals, and to

⁵⁶ Tania Sendel and Jess Thompson, Kevin Alcock, Randy Luikart, and Dave Dawson, “Horse Foot Health”, *Ministry of Agriculture, Food, and Rural Affairs* (2012).

⁵⁷ *Ibid.*

⁵⁸ *Ibid.*

reset shoes, often therapeutically designed to ease discomfort caused by conditions such as laminitis and arthritis which are very common in horses. While we are now aware of the intricacies of hoof care and the hard work that must go into maintaining proper foot health in animals of the equus family, this was not always in common knowledge nor was it always in evidence, particularly when analyzing the early years of the First World War.

Early in the war especially, hoof care ‘professionals’ still abided by the mid-18th century style of trial-and-error learning, a “process pejoratively referred to as ‘empiricism.’”⁵⁹ Lessons were eventually learned using this method but typically at a very slow rate and to the detriment of the animals who relied on individuals with knowledge in the field to survive. With millions of horses being employed in the war effort and 41,755 veterinarians associated with the Royal Army Veterinary Corps alone joining alongside them, it was rapidly realized that individuals who were versed in farriery practices had to be enlisted as well.⁶⁰ As more and more individuals signed their lives away to engage in this brutal conflict, many, particularly those with previous horse experience, opted to join the equine care teams of their country’s militia. While this was important, unfortunately, given the lack of professionalism in the field at the time, blacksmiths and farriers who enlisted in the ranks from 1914 on were often poorly educated, if at all, leading to a great deal of costly errors that decimated equine numbers unnecessarily. Officers who had the power to impress upon their troops the value of adequate hoof care further did not do so due to a lack of appreciation of the value of proper shoeing and their inability to understand the effects of improper farrier work. It became increasingly noted by those officers and soldiers concerned about animal welfare that there was “more destruction of horse-flesh in the field from

⁵⁹ Clay McShane and Joel A. Tar, *The Horse in the City: Living Machines in the Nineteenth Century* (Baltimore: The Johns Hopkins University Press, 2007), 157.

⁶⁰ “History of the Royal Army Veterinary Corps”, *Museum of Military Medicine* (Accessed July 3, 2022), <https://museumofmilitarymedicine.org.uk/about/corps-history/history-of-the-royal-army-veterinary-corps/>

careless shoeing...than from any other cause,” often resulting in broken legs and other gruesome injuries.⁶¹ These grave errors were typically a direct result of improper understandings of the animals on the part of the personnel assigned to equine care. As a result, this negligence of the “most simple rudiments of horse-care” ended up costing Canada alone millions during the first two years of hostilities.⁶² This lack of understanding early in the war went beyond those actually assigned to this aspect of equine care as well, with Canadian troops in Southern England being noted for having the “tendency to ride horses too hard and wear out their hooves.”⁶³ With so many individuals being “totally unqualified” to manage and properly maintain equine hooves, there is little wonder why so many horses, donkeys, and mules lost their lives to hoof-related injuries early in the war.⁶⁴ In an effort to minimize these losses, Courts of Inquiry were held in order to investigate improper shoeing as a careless cause of animal death, due to the fact that it contributed to a high degree of fractured legs from which the animals could never fully recover.⁶⁵ With such bad practice so prominent early in the Great War, clearly changes had to be made to limit unnecessary loss of the same horse power that served to ensure well-supplied troops.

It would be naive to claim that all of these errors were strictly due to this negligence and inexperience on the part of staff assigned to work on equine feet throughout the First World War. Another concern that made proper farrier work nearly impossible particularly early in the war was that of insufficient supplies of necessary shoes and nails. As Major-General Sir Archibald Macdonnell, the General Officer Commanding of the 1st Canadian Division, emphasized, “no

⁶¹ “War Diaries - Assistant Director of Veterinary Services, Canadian Corps”, *Library and Archives Canada* RG9-III-D-3, Volume 5042 File 884, January 1917, 20.

⁶² *Ibid*, 20.

⁶³ Andrew McEwan, ““Maintaining the Mobility of the Corps:” Horses, Mules, and the Canadian Army Veterinary Corps in the Great War”, Doctoral Thesis, University of Calgary (2016), 271.

⁶⁴ *Ibid*, 104.

⁶⁵ Court of Inquiry - “Inquiring into the circumstances of the shooting of horses, no. 3691, belonging to Canadian Light Horse [Court of inquiry re]”, *Library and Archives Canada* 1917, Volume 3888 Folder 41, File 7, File part 41.7.

shoe, no foot; no foot, no horse; no horse, no transport; no transport, no battalion.’’⁶⁶ Without access to something as seemingly insignificant as properly fitting horseshoes, battalions were essentially doomed. While some horses can thrive going barefoot with no shoes, many of the equines used throughout the war required shoes in order to traverse the ground and road conditions. Horseshoes helped to stabilize the feet and offered the animals much needed support in order to continue to do their jobs. Given that the majority of horses, donkeys, and mules were required to stand in deep mud for extended periods of time, they often fell victim to conditions like hoof abscesses if they did not have access to proper shoeing, a condition that would put them out of action for weeks or even months if left untreated. Further, as the ground became progressively churned from shell fire and troop movement, deep mud put the animals at risk of pulling what valuable shoes they had from their feet and falling victim to infections of the foot. As troops began to recognize the significance of ensuring proper shoeing for all animals, they were met with the obstacle that supplies of this significant commodity were scarce. In records left behind by veterinarians and shoe-smithing personnel, there was “a general complaint of the difficulty of obtaining shoes” as a cause for numerous difficulties experienced by units.⁶⁷ Hundreds of horses, especially early in the war, were noted by veterinary staff to be “suffering from sore feet and want of shoes, owing to lack of material and facilities.”⁶⁸ Those concerned, such as Colonel William Neill who was named the Director of a distinct Directorate of Veterinary Services and Remounts between March 1915 and June 1916 and who did come with some degree of equine management experience having graduated from the Ontario Veterinary

⁶⁶ Lt. Col. D.S. Tamblin, *The Horse in War* (Kingston: The Jackson Press, 1920), 24.

⁶⁷ Andrew McEwan, ““Maintaining the Mobility of the Corps:” Horses, Mules, and the Canadian Army Veterinary Corps in the Great War”, Doctoral Thesis, University of Calgary (2016), 160.

⁶⁸ “War Diaries - Assistant Director of Veterinary Services, Canadian Corps”, *Library and Archives Canada* RG9-III-D-3, Volume 5042 File 884, 1917, 12.

College in 1902, wrote of their worries.⁶⁹ On 6 November 1914, Neill noted that unshod horses were continually being found maimed from working on macadam roads that “wore their hoofs down very quickly” without the help of proper shoes.⁷⁰ Later, on 30 November, he commented again on the state of shoeing in the animals he saw, stating that a “great deal of trouble” had “been found with the horses’ feet owing to not being shod,” while the animals stood knee-deep in mud.⁷¹ With supplies being so difficult to obtain, especially early in the war, some troops attempted to find their own supplies. The 2nd Brigade CFA’s training was seen to suffer so badly in January 1915 as a direct result of the fact that up to 50% of the Brigade’s horses were “not fit to go on the road due to lack of shoeing.”⁷² Brigade members appealed to their superiors, claiming that if they were granted the authority to privately purchase shoes, nails, and tar, “conditions should quickly improve.”⁷³ Unfortunately, early in the war, even those troops who did obtain proper supplies knew too little to appropriately fit them, resulting in many further injuries from ill-fitting shoes. Shoes have to be perfectly fit to each animal since each has a unique hoof shape. Shoeing too long in the heels or trying to fit a shoe that is too small or too large would have horrific impacts.

Further devastation came from injuries sustained as a direct result of lack of shoeing and dreadful ground and road conditions. Roads were not only hazardous in that they were slippery, especially for horses with “unroughed horse shoes”, but also due to the fact that roads were progressively torn apart and covered with nails.⁷⁴ The animals were extremely vulnerable to hoof

⁶⁹ Andrew McEwan, “‘Maintaining the Mobility of the Corps:’ Horses, Mules, and the Canadian Army Veterinary Corps in the Great War”, Doctoral Thesis, University of Calgary (2016), 105.

⁷⁰ “War Diaries - Deputy Assistant Director of Veterinary Services, 1st Canadian Division”, *Library and Archives Canada* RG9-111-D-3, Volume 5042 File 885, November 1914, p. 4.

⁷¹ *Ibid*, November 1914, p.9.

⁷² Andrew McEwan, “‘Maintaining the Mobility of the Corps:’ Horses, Mules, and the Canadian Army Veterinary Corps in the Great War”, Doctoral Thesis, University of Calgary (2016), 152.

⁷³ *Ibid*, 152.

⁷⁴ Lorraine Jordens, “Diary of a World War One Veterinary Officer”, *Can Vet J* Volume 28 (1987): 276.

injuries as a direct result of these nails that were strewn about, often putting them out of work for extended periods of time. Nails and other shrapnel were often simply abandoned or thrown about by shellfire, leaving roads at and behind the frontlines scattered with sharp obstacles that tended to get picked up by equine feet. Beyond this, nails could also be intentionally placed by German troops in the form of caltrops in an effort to halt British transport of troops and supplies. Caltrops were strips of “wood with nails driven upwards” in them that were distributed across the ground where BEF horses would be walking.⁷⁵ This weapon of war had an incredibly long history and was popularized many years before the Great War. Originally named after “the star thistle, a weed whose form and function were similar to those of the weapon,” countless generations of warriors used caltrops in warfare all across Europe, Asia and North Africa. Although the true origins of the caltrop “remain shrouded in mystery,” it has been suggested that the earliest recorded use of them occurred in Persia (now Iran) during the Battle of Arbela or Gaugamela which took place on October 1, 331 BC.⁷⁶ From there, caltrops were employed during countless historic battles and wars, including by the Romans at the Battle of Nisibis in 217 AD and in the Battle of Jalapa in 637. Eventually, caltrops “declined in popularity in Europe” but would be occasionally employed later, including throughout the First World War and much later during the Korean War.⁷⁷ Any animal that accidentally stepped on the nails of a caltrop would find themselves with punctures in their feet, “making them lame or causing infection.” This allowed the other side to gain an upper hand since troops relied so heavily on the health and soundness of their equines to move at and behind the frontlines. In the winter of 1916/1917 alone, nearly eight

⁷⁵ Marguerite Helmers, “Fortunino Matania’s Goodbye, Old Man”, in *Portraits of Remembrance: Painting, Memory, and the First World War* edited by Margaret Hutchison and Steven Trout (Tuscaloosa: The University of Alabama Press, 2020), 203.

⁷⁶ Robert W. Reid, “Diabolical in Its Simplicity, the Ancient, Durable Caltrop Remains an Effective Defensive Weapon Today,” *Military History* 15 (3) (1998).

⁷⁷ *Ibid.*

hundred Allied horses were hospitalized from nail injuries.⁷⁸ This is an enormous number and the negative impact of having so many animals put out of work cannot be underestimated. Further, British forces particularly noted that the total number of horses affected by nail punctures in their units in France was as many as four hundred in one week.⁷⁹ With so many animals put out of work, troops struggled to properly supply their units with food, ammunition and other vital resources, therefore facing catastrophic effects.

To add further stress to the already dismal state of the equine foot at the Western Front, horses were frequently left picketed in fetlock-deep mud which overtime came to be mixed with urine. The fetlock is the joint connecting the horse's cannon bone and pastern bone, essentially acting as the animal's ankle joint, so this had the potential to cause significant health concerns for equine feet. Horses left standing for long periods of time in this level of mud came to develop "ulcerated cracks on their heels."⁸⁰ This condition was a serious one. While it was not necessarily fatal, such cracks could result in festering ulcers which in turn led to septicemia if left untreated, subsequently necessitating the destruction of otherwise healthy animals. This was a major concern because of how common it truly was. In January 1915, it was noted by veterinary staff that over 100 horses of the 3rd Brigade CFA's Ammunition Column were temporarily incapacitated due to cracked heels, thus diminishing the effectiveness of this unit, and any others that faced similar concerns.⁸¹ There was no easy solution for this affliction aside from careful grooming and relocation of picketing lines, both of which were nearly impossible thanks to lack of supplies and insufficient space to move around. Suggestions were made to try

⁷⁸ Marguerite Helmers, "Fortunino Matania's Goodbye, Old Man", in *Portraits of Remembrance: Painting, Memory, and the First World War* edited by Margaret Hutchison and Steven Trout (Tuscaloosa: The University of Alabama Press, 2020), 203.

⁷⁹ *Ibid*, 204.

⁸⁰ Andrew McEwan, "'Maintaining the Mobility of the Corps:': Horses, Mules, and the Canadian Army Veterinary Corps in the Great War", Doctoral Thesis, University of Calgary (2016), 156.

⁸¹ *Ibid*, 156.

to alleviate this concern, but unfortunately, owing to the lack of knowledge surrounding the nature of and care for horses, such proposals resulted in few improvements. For example, a memo from the Army Veterinary Corps sent to Lieutenant Alfred Savage, the Veterinary Officer to the 11th Brigade Canadian Field Artillery, suggested that “horses be taught to urinate in places provided for the purpose” to prevent them from standing in their own waste contributing to ulcerated heel cracks.⁸² Equines cannot be trained to do something like this particularly when in large groups, pointing to the severe lack of understanding when it came to these animals.

The news was not all bad though. With so many equine casualties having their roots in dismal hoof conditions, veterinarians and farriers worked together in an effort to mend the situation and ensure better care and subsequently less catastrophic equine casualties as the war continued. First, in an effort to minimize equine casualties from nail injuries, posters were tacked up around camps and bases pointing out the seriousness of permitting nails to lie around.⁸³ As it was increasingly impressed on all soldiers that horses were significant to the war effort and that nails could have devastating effects, soldiers were encouraged to be cognizant of nails lying around. Boxes were placed on fence walls for the disposal of nails found by men on the road and some divisions even put men out for the sole purpose of collecting nails and other sharp pieces of iron that were liable to be picked up by the feet of horses travelling on the roads.⁸⁴ This practice ensured that fewer equines succumbed to nail injuries in the hooves, preventing unnecessary visits to equine hospitals. These hospitals were situated behind the frontlines and typically comprised of a large building which permitted sick or injured animals to take shelter from the dismal weather conditions as well as individual pastures or corrals which allowed the animals to

⁸² Lorraine Jordens, “Diary of a World War One Veterinary Officer”, *Can Vet J* Volume 28 (1987): 277.

⁸³ Andrew McEwan, ““Maintaining the Mobility of the Corps:” Horses, Mules, and the Canadian Army Veterinary Corps in the Great War”, Doctoral Thesis, University of Calgary (2016), 204.

⁸⁴ *Ibid*, 204.

move around outdoors when the weather permitted. Further, these hospitals were generally well-supplied with medicines, riding equipment, and other necessary items to help nurse equine debility cases back to health. Each army had their own collection of such institutions, and they sometimes shared such locations with other units, as was the case when units from the United States arrived in 1917. Being new to the front and without their own facilities in place, the French donated some of their own hospitals to the U.S. although this only included the facility and not the supplies necessary to maximize the effectiveness of these hospitals.⁸⁵

Alongside this increased emphasis on paying attention to ground conditions in an effort to avoid injuries, other changes were made to ensure a greater degree of hoof comfort in the



Figure 5 : “A New Zealand Expeditionary Force shoeing smith at work, 1916.”

animals. For one, cold shoeing was adopted in the field.⁸⁶ Hot shoeing, a practice that was popularized in the 16th century, was a more costly and time-consuming process wherein the shoes were placed in a kiln and heated up and then burnt onto the foot to ensure proper

fit.⁸⁷ Alternatively, cold-shoeing was a much quicker process which meant that more animals could be shod in the same period of time. The switch to cold-shoeing not only limited the

⁸⁵ “The Veterinary Corps: Caring and Curing”, *The United States World War One Centennial Commission*, Accessed January 2022, https://www.worldwar1centennial.org/index_pop/brookeusa-veterinary-corps.HTML

⁸⁶ “Official Field Service Pocket Book of 1914 Veterinary Service (UK)”, *H.M. Stationary Office* (1914): Article 5.

⁸⁷ Rachel Cohen, “The History of Horseshoes”, *Dressage Today*, April 4, 2002, <https://dressagetoday.com/horse-health/history-of-horseshoes/>

previous ignorance displayed regarding hot-shoeing but also allowed for farrier work to be conducted on the spot rather than strictly in locations that had access to kilns or other heat sources where the shoes could be heated up to an appropriate temperature.

With more awareness spreading about the dangers of improper hoof care, a higher degree of education was offered not only to farriers and veterinarians but also to all those charged with the care of these animals. From simple efforts made such as impressing upon men the significance of picking equine feet frequently and limiting ridden time to only when absolutely necessary to more complex improvements such as educating individuals on how to treat common hoof conditions, changes were rapidly made to avoid unnecessary injury and loss of equine life. Veterinary handbooks distributed to troops, for example, offered insight into how to properly cure thrush to avoid it getting out of control and necessitating serious veterinary intervention. It was advised that the frog, the soft and sensitive ‘v’ on a horse’s foot, be cleaned thoroughly and dressed with Boric Acid. Then, it was suggested that the area should be plugged with pieces of tow. If the case of thrush was severe, it was advised that the foot be poulticed or soaked before the dressing was applied, a practice still in use today when dealing with this condition.⁸⁸ It was further impressed upon those concerned that the animals should be permitted to stand on the driest ground possible and that shoes with what was called tips should be secured to keep the sensitive parts of the hoof off of the ground.⁸⁹ This helped to encourage more rapid recovery from the debilitating condition which subsequently ensured that the animals could return to service more quickly.

In a specific case, termed ‘Case 40’, a better understanding of the significance of foot injuries and proper rehabilitation from them can clearly be seen. A brown mare was admitted to

⁸⁸ Ibid, Article 12.

⁸⁹ Ibid, Article 12.

the hospital suffering from a “deep fissure in the hoof” that extended into the sensitive structures, making the animal incredibly lame. Each step the mare took caused “excruciating pain and some hemorrhage was caused to the sensitive foot”.⁹⁰ Previously, an animal in such a condition would have had to be put down as the injury was a difficult one to mend. However, thanks to a higher degree of understanding and emphasis placed on proper education and care as the war progressed, steps could be taken to ensure this was not the case. Chloroform was quickly administered and under its influence those charged with her care were able to remove a portion of the horn, the outer portion of the hoof, to relieve pressure.⁹¹ They then applied medicated soothing poultices to help the mare heal more quickly. After a few days, it was seen that the pain was nearly entirely ceased and the horse was found to be walking soundly. Of course, it was recognized that some time was needed for “new horn to grow to replace the portion removed” but this was a successful surgery that allowed this horse to eventually return to service, a cheaper remedy than having to source more horses to be sent to the warfront, which was becoming increasingly difficult thanks to minimal supply and threat of German U-boat attacks on Allied shipping.⁹²

Certainly, as errors made by early farriers became evident, efforts were made to better educate and professionalize this fine art. Farriers and shoeing-smiths who enlisted became more professionally trained around the same time that emphasis was placed on ensuring veterinarians had proper schooling for their practices. By May 1916, the Veterinary and Farriery Training School opened near Shorncliffe under Colonel William Neill’s authority.⁹³ This school served to

⁹⁰ Purple Cross Service: For Wounded and Sick Army Horses, *Horses Helped* (London: St. Clements Press, Ltd., 1915), 3.

⁹¹ *Ibid*, 3.

⁹² *Ibid*, 3.

⁹³ Andrew McEwan, “Maintaining the Mobility of the Corps:” *Horses, Mules, and the Canadian Army Veterinary Corps in the Great War*”, Doctoral Thesis, University of Calgary (2016), 268.

ensure a proper supply of farriers and shoeing-smiths and that all who were enlisted were sufficiently trained and ready to serve in the Canadian Expeditionary Force specifically. At Shorncliffe, those individuals training for the role spent days shoeing and exercising horses to ensure that all animals were fit and secure on their feet.⁹⁴ Classes were held under great difficulties, working tirelessly in open air in the summer and under thin canvas in



Figure 6: “Farriers of the Royal Scots Greys at work, c1918.”

the winter; this helped to correct the “universal ignorance of farriers in methods and treatment” so commonly seen earlier in the war.⁹⁵ Trainees worked hard in the schools to learn the proper techniques associated with the art and were not allowed to be sent out for service until they had mastered the course. In fact, if a recruit was “plucked” from the program due to insufficient experience and poor test results, they were, despite the huge demand for farriers and shoeing-smiths overseas, forced to remain at the school and were instructed to enter the next course, thus helping to ensure well-taught and competent individuals taking on this significant role.⁹⁶ This increase in proper education and training for these personnel ensured that conditions for equine feet were drastically improved towards the end of the war. Lieutenant-Colonel Morrison made this blatantly clear when he noted as early as October 23rd, 1914 that a “marked improvement” had been shown “in the condition of the horses” which suggests that a broader process of

⁹⁴ Ibid, 148.

⁹⁵ “War Diaries - Assistant Director of Veterinary Services, Canadian Corps”, *Library and Archives Canada* RG9-III-D-3, Volume 5042 File 884, 1917, 16.

⁹⁶ Ibid, 16.

learning and professionalism for farrier staff was underway, to the benefit of the animals.⁹⁷ It was further remarked by veterinary officers that what had been “saved to the country, in dollars and cents, as a direct result of the establishment of these schools was incalculable.”⁹⁸

Education went beyond these schools as well, especially later in the war. Weekly conferences were frequently held by veterinary staff as the war progressed which served as a means to educate more people involved in equine care on the latest in shoeing techniques and hoof rehabilitation. For example, on January 26, 1918 during one of these conferences there was discussion of the value of using metal plates under the shoes of animals to help in the prevention of picking up nails. The conference agreed that picking up nails was successfully prevented using this shoeing method but that there were also disadvantages to this. Dirt was seen to have collected between the foot and the plate which would then become very hard, bruising the sole and subsequently lamming the animal. The plate was also found to not be stiff enough to prevent bending when the animal stepped on a stone. Further, the depression that had to be made in order to receive the frog would often not fit, making it necessary to cut the frog so that the plate could be put on, a process that was quite damaging to the hoof structure in the long run and quite painful for the animals.⁹⁹ These errors were discussed in detail in these conferences in order to learn from past mistakes and to ensure that such painful consequences were limited in future cases. Instructions were given to veterinary officers, who underwent significant training and were kept as up to date as possible on the latest equine management practices, as to their duties with units to which they were assigned and they were frequently encouraged to give lectures and

⁹⁷ Andrew McEwan, ““Maintaining the Mobility of the Corps:” Horses, Mules, and the Canadian Army Veterinary Corps in the Great War”, Doctoral Thesis, University of Calgary (2016), 148.

⁹⁸ “War Diaries - Assistant Director of Veterinary Services, Canadian Corps”, *Library and Archives Canada* RG9-III-D-3, Volume 5042 File 884, June 1917, 16.

⁹⁹ *Ibid*, 12.

share instructions on findings to ensure that no further damage was sustained as a result of this style of shoeing. Units were clearly becoming aware of how their actions affected the animals and were striving to prevent future damage for them.

While proper supply of shoes and nails continued to be a complaint throughout the war, action was taken in an effort to help overcome this obstacle as well. With horse care being an evolving skill, units worked hard to overcome the challenges of not having sufficient supplies. Upon receiving a report on hoof conditions and shoeing, Major-General E.A. Altham requested that the General Officer Commanding “take immediate steps to remedy the defects in shoeing” in the Canadian Expeditionary Force by requesting shoes from the Chief Ordnance Office at Tidworth.¹⁰⁰ This would allow more animals to be properly shod and minimize injury caused by a lack thereof. Further, Major Charles Long, the Divisional Ammunition Column Adjutant to the 1st Canadian DAC, wrote that training encouraged in units included practice for shoeing-smiths in fitting spare shoes, “50 per cent of which” were to be “carried in the shoe cases and the balance” in wagons.¹⁰¹ This ensured that multiple uses could be secured out of each set of shoes. While this was not necessarily ideal as shoes eventually do get worn down, it was an ingenious way of responding to the difficulty of obtaining sufficient shoeing supplies and ensured that more animals were shod even if they were hand me downs. This helped to ensure that conditions for equine feet did improve throughout the duration of the war. While horses still often wrenched shoes from their feet and mistakes were still made, farriers were able to remedy the situation quickly and “worked incessantly under adverse conditions” to ensure the best possible care.¹⁰²

¹⁰⁰ “Major-General E.A. Altham, for GOC Southern Command, to Secretary, War Office”, *Library and Archives Canada* (January 29, 1915), RG 9 III-B-1, Vol. 3379 Folder J-3-45.

¹⁰¹ Andrew McEwan, ““Maintaining the Mobility of the Corps:” Horses, Mules, and the Canadian Army Veterinary Corps in the Great War”, Doctoral Thesis, University of Calgary (2016), 221.

¹⁰² Lt. Col. D.S. Tamblin, *The Horse in War* (Kingston: The Jackson Press, 1920), 24.

Further, in an effort to better educate those responsible for the care of equine feet, farrier competitions were often held to promote “efficiency in this art.”¹⁰³ All of these steps helped to secure improved hoof care, ensuring that countless animals were able to recover from hoof injuries and continue to serve the BEF.

While all of the steps towards the betterment of equine hoof care were important, the true motives behind dedicating so much time and energy to these improvements must be admitted. While it would be nice to simply say that these changes were made because individuals rapidly realized that horses, donkeys, and mules were living beings that deserved to be protected and properly cared for just as their human comrades were, this would be a false claim to make. At the core of the decisions to dedicate so much time and effort towards promoting farrier education and efficiency was the fact that horses were so vital to the war effort. Again, as Major-General Sir Archibald Macdonnell said, “no shoe, no foot; no foot, no horse; no horse, no transport; no transport, no battalion!”¹⁰⁴ This quotation centralizes on the idea of preserving equine life not because these animals were living beings and therefore important but because they were important to war. Since horses were the primary tool used in transporting both supplies and troops, they were heavily relied upon for the war efforts of both sides. Without sufficient hoof care, these animals were liable to break down and be unable to perform their jobs effectively, thus impeding their ability to carry on the fight. While there were evidently major advancements made in this realm of equine care, this was less for animal comfort and more for the benefit of the units that so desperately relied upon them. As the war progressed, it was realized that securing more equines for the war effort was becoming increasingly difficult. Most Allied countries had already sent a huge stock overseas earlier in the war and therefore had few horses

¹⁰³ Ibid, 24.

¹⁰⁴ Ibid, 24.

left behind that met the requirements to make good war horses. What was needed in a horse to make it an effective war horse was bravery, resilience and athleticism or strength. Horses that shied away at the slightest of sounds or which could only endure a limited amount of exercise in a day could not stand up to the enormous tasks asked of them at the Western Front. As well, with ocean travel becoming increasingly dangerous due to German U-boat attacks, moving horses overseas was becoming a costly and time-consuming challenge. The easiest method to ensure proper supply of equines for the British war effort was found to be through the limitation of casualties in the animals they already had. Essentially, putting energy and time into properly training farriers and shoeing-smiths was an easier route than having to get all new stock.

Most of the changes that took place as a result of horrific conditions for equine feet early in the war were made as quick and relatively easy fixes to ensure minimal unnecessary loss of horse power. Sometimes, these fixes were even made to the detriment of the animals such as in cases reported of trimming horses with short heels and placing metal plates on feet just to keep the animals moving enough. Fixes like these were ultimately short-term solutions that still had detrimental impacts on the animals once they failed to mask the problem for any longer. For horses who were seen to be pulling shoes frequently, the suggested remedy was to shoe the animals short at the heels. In fact, there was a “divisional order which was sent out” to units associated with the CEF after countless horses that were shod long at the heels struggled at Passchendaele. This order required that “all horses and mules that were being used” be “shod with practically no heel at all to the shoe.”¹⁰⁵ This did serve to limit the pulling of vital shoes but it also made the animals sore and uncomfortable, and often ruined their feet in the long run, thus simply masking the problem of shoe-pulling and contributing to a rise in the discomfort of

¹⁰⁵ Ibid, 24.

animals. Professionalism of the art also focused more on benefiting those involved rather than the animals themselves. The farriery competitions certainly promoted the art but were more so for much needed entertainment and rest from the conditions at hand for the men involved. Promoting the art further acted as a means to ensure post-war livelihood for some as well as to encourage a higher degree of enlistment.¹⁰⁶ Propaganda posters at home linked service with equines to the “acquisition of marketable knowledge and skill for specialized trades or professions,” particularly that of farriery, and therefore the promise of work after the war.¹⁰⁷ This encouraged greater enlistment as men saw an opportunity to make a living not only for the short-term but also well into the future if they were fortunate enough to survive the war. This was less to the benefit of the animals and more for the men. Thus, while these advances are significant when analyzing the presence of equines at the Western Front in the First World War, it is equally important to understand the motivation for these advances. Those individuals involved were making changes not because they wanted to limit suffering of living beings, but rather to benefit their troops and the war effort of the British Expeditionary Force and their partners.

¹⁰⁶ Charles A. Carmello, “‘They Had No Choice:’ Images of Equines in the Great War”, *Anglistik International Journal of English Studies* 29.1 (2018), 75.

¹⁰⁷ *Ibid*, 75.

Chapter 2: Mange - The Decimator of Equine Troops

Imagine sitting tucked alongside your comrades in the dark and dreary trenches of the First World War. Shells are constantly exploding around you and every bit of movement you detect is enough to send your body into tremors, fearful of what is to come next. The horrific sounds and the loss of so many of those you know is enough to ruin your nerves but the weather certainly does not help either. Constantly being surrounded by mud, sitting fully exposed to rain and snow or something in between, your skin crawls and trench foot lingers as a very real possibility. Now imagine not being able to vocalize your discomfort and pain. In nearly all personal recollections of the First World War, the harsh weather conditions are cited as one of the most difficult obstacles for troops trying to survive and fight at the Western Front. Trenches were frequently filled with mud and fighting forces consistently met with rain, snow, and sleet especially in the fall and winter months. The unforgiving weather wore on everyone's minds and contributed to a significant degree of pneumonia and other exposure-related illnesses in the millions of men and women calling the frontlines home from 1914 until 1918. The impacts of such dismal weather was beyond profound. The millions of horses, donkeys, and mules who fought alongside their human comrades also struggled to cope with the unbearable weather and faced detrimental health issues resulting from the conditions too. This chapter will explore the horrific conditions for equines throughout the war that contributed to a rise in skin diseases for the animals. Further, this chapter considers the various changes that were made in an effort to limit loss of equine numbers due to such conditions before considering the underlying reasons why these equine care shifts were ultimately made.

Amongst the most devastating of illnesses forced upon equines throughout the Great War were those affecting the skin owing to the wretched environment and a lack of attention paid to

proper grooming, particularly early in the war. Most notable was mange, a contagious disease of the skin that affects all classes, ages, and conditions of domestic animals. This disease is “caused by a minute parasite commonly known as a mite” that lives on or in the skin of animals and reproduces by means of eggs.¹⁰⁸ The disease typically develops slowly, with lesions being “seldom noticeable before the expiration of at least three weeks from the date of infection.”¹⁰⁹ While certainly this disease existed and was of concern prior to the war, it was a condition that concerned primarily farmers and stockmen, particularly those operating in ranching districts of Western Canada.¹¹⁰ While historical records show that mange existed even in the late 1800s, with several companies releasing products like Professor Dale’s Persian Horse and Cattle Powders which helped to relieve conditions like mange, there are few records noting it as a major concern for animals in either rural or urban centres, suggesting that the condition was not a concern on a large scale.¹¹¹ Out of control mange is more commonly associated with army horses employed in war, as in the war in South Africa when so many equines suffered from skin conditions that Debility Farms, farmland that was designated for the purpose of housing and attempting to rehabilitate sick or injured equines, had to be instituted between 1899 and 1900.¹¹²

Mange typically occurs in neglected animals due to the fact that “good care and systematic grooming” serve to prevent the disease from developing and ensure that the localization of the parasites does not take hold, deterring their progress.¹¹³ Mange in equines, if

¹⁰⁸ George Hilton, *Mange in Horses, Cattle and Sheep*, (Ottawa: F.A. Acland, Published by direction of the Minister of Agriculture, 1923), 1.

¹⁰⁹ *Ibid*, 1.

¹¹⁰ Department of Agriculture Ottawa, *Health of Animals: Mange in Horses and Cattle* Bulletin No. 12, (Ottawa: Published by Authority of the Minister of Agriculture, 1911), 3.

¹¹¹ Anthony P. Cavender and Donald B. Ball, “Home Cures for Ailing Horses: A Case Study of Nineteenth-Century Vernacular Veterinary Medicine in Tennessee”, *Agricultural History* Vol. 90, No. 3 (2016): 330.

¹¹² William Hunting, *The Veterinary Record: A Weekly Journal for the Profession* Volume XXV July 1912 to June 1913, (London: H. & W. Brown, 1913): 137.

¹¹³ George Hilton, *Mange in Horses, Cattle and Sheep*, (Ottawa: F.A. Acland, Published by direction of the Minister of Agriculture, 1923), 2.

permitted to spread unchecked, often has devastating impacts on the host animals. Typically developing first in the region of the withers, the ridge between a horse's shoulders at the highest point of the back, before extending in an irregular manner over the surface of the body, mange had the power to spread quickly. Three varieties most commonly affected horses: sarcoptic, meaning body mange; psoroptic, meaning localized in the mane; and symbiotic, generally meaning confined to the legs. When neglected, mange could produce a constitutional disturbance that could eventually be fatal.¹¹⁴ Not only do the mites associated with this disease tend to cause intense irritation of the skin and hypersensitivity, they can also contribute to hair loss and inflammation that is uncomfortable for the animals. Further, those with mange have been recorded to rapidly lose condition. They often cannot gain sufficient weight necessary in order to thrive and frequently fall into such a low condition that in severe winter weather large losses are not infrequent, given that the animals are not equipped to cope with extreme cold in their depleted states.¹¹⁵ While this disease rarely plagues equines today, thanks to knowledge of proper grooming and blanketing practices to limit exposure to harsher weather, it was extremely common throughout the First World War, rapidly becoming the bane of veterinary staff's existences, who frequently had to develop new and ingenious ways to cope with the disease. Mange was noted under the Animal Contagious Diseases Act of 1906, an act released to the United Kingdom and its dominions as per Rules of the Supreme Court, which demanded that every owner, breeder, dealer, and veterinary surgeon suspecting the existence of the disease in horses, cattle, and sheep must immediately separate the afflicted animals and notify the nearest

¹¹⁴ Mason V. Reichard & Jennifer E. Thomas, "Mange (Acariasis, Mange Mites) in Horses", *Merck Manual Veterinary Manual*, Last Modified November 2019.

¹¹⁵ Department of Agriculture Ottawa, *Health of Animals: Mange in Horses and Cattle* Bulletin No. 12, (Ottawa: Published by Authority of the Minister of Agriculture, 1911), 3.

veterinary inspector. Particularly early in the war, however, very little was known regarding the disease and how to cope with it, contributing to a rise in unnecessary losses of army equines.¹¹⁶

The conditions for equines at and behind the frontlines of the Western Front were far from ideal. Horses and mules frequently “endured brutal working conditions in the mud and mire” and, in countless cases suffered “privation, violent death, and mass burial.”¹¹⁷ Tethered in open horse lines and exposed to the winter elements of rain, sleet, snow, and wind, the animals endured conditions that were deplorable, particularly those animals coming from places like Australia and New Zealand who were unaccustomed to the harsh winters seen overseas. Most animals were left with no protection from this constant onslaught of miserable weather and those who did get some protection were granted sodden and filthy blankets which further aggravated their sensitive skin. When granted access to stalls or other forms of shelter, three or four horses were often confined to a single structure even though these were only designed to house a maximum of two.¹¹⁸ The animals were essentially forced to live on top of one another, which allowed skin diseases such as mange to run rampant through them. Lack of proper shelter and of movement of picketing lines to drier areas allowed stables and paddocks to become hotbeds for the spread of mange, the “greatest proven single enemy of horse-flesh in this war,” and other diseases.¹¹⁹ In fact, thanks to the dismal living conditions, the chief cause of unnecessary horse wastage was “given as ‘debility’” brought about by exposure which lowered the animals’

¹¹⁶ George Hilton, *Mange in Horses, Cattle and Sheep*, (Ottawa: F.A. Acland, Published by direction of the Minister of Agriculture, 1923), 1.

¹¹⁷ Charles A. Caramello, “‘They Had No Choice:’ Images of Equines in the Great War”, *Anglistik: International Journal of English Studies* 29.2 (2018), 77.

¹¹⁸ Lorraine Jordens, “Diary of a World War One Veterinary Officer”, *Can Vet Journal* Volume 28 (1987), 277.

¹¹⁹ “War Diaries - Assistant Director of Veterinary Services, Canadian Corps,” *Library and Archives Canada* RG9-III-D-3, Volume 5042 File 884, 1917, p. 19.

resistance.¹²⁰ Veterinary staff assigned to the role of assessing animals associated with any given unit of the BEF at the Western Front frequently noted that animals had very dirty coats with “skin in poor condition” as a direct result of their dismal living quarters.¹²¹

With conditions being so awful, there is little wonder why mange was such a concern. Many veterinarians expressed their concerns over the spread of this awful and entirely preventable disease in their personal recollections of the war. Lieutenant Alfred Savage, Veterinary Officer to the 11th Brigade Canadian Field Artillery, was one of them. He was assigned to manage the No. 1 Veterinary Hospital in Le Havre, France, having a great deal of experience thanks to the eight months he spent at the Front previously at Agniers near Aubigny-en-Artois, Capelle-Fremont, and Mount St-Eloi.¹²² Clearly very experienced and well-versed in managing equine health in trying times, Savage quickly became shocked and appalled by the condition of the BEF equines picketed at and behind the frontlines. In December 1916, while working with some of the animals, he found three cases of mange in the 29th Battery horses, the first sign of the disease noted since July “just prior to the Battery leaving England for the continent.”¹²³ Given that mange is a highly contagious disease and that most units did not have sufficient space to allow for animals to be stabled or picketed individually, mange rapidly spread from horse to horse, often bypassing mules who tended to be more hardy and less susceptible to it.¹²⁴ Mange was such a preoccupation that, in looking at veterinary diaries from the early years of the war, it is challenging to find records that do not raise concern over it. For example, on

¹²⁰ Marguerite Helmers, “Fortunino Matania’s Goodbye, Old Man”, in *Portraits of Remembrance: Painting, Memory, and the First World War* edited by Margaret Hutchison and Steven Trout (Tuscaloosa: The University of Alabama Press, 2020), 204.

¹²¹ “War Diaries - No. 1 Canadian Mobile Veterinary Section,” *Library and Archives Canada* RG9-III-D-3, Volume 5043 File 890, 1918.

¹²² Lorraine Jordens, “Diary of a World War One Veterinary Officer”, *Can Vet Journal* Volume 28 (1987), 275.

¹²³ *Ibid*, 275.

¹²⁴ *Ibid*, 276.

February 24 of 1915, the Deputy Assistant Director of Veterinary Services for the 1st Canadian Division noted that two cases of suspected mange were reported from the 1st Canadian Artillery Brigade.¹²⁵ While this seems like a relatively low number, this was from one day in one brigade. Frequently, these numbers were matched daily across all units working with and alongside equine soldiers.

Unfortunately, mange was not the only condition that affected the animals and was made worse by inadequate living conditions for equines at the Western Front. Ringworm was another illness that thrived in the wet conditions of the frontlines, and its presence was also “exacerbated by the lack” of understanding of proper daily equine care such as sufficient grooming.¹²⁶ This condition resulted in itchy skin and hair that would fall out in patches. Instructions to all those concerned stipulated that the affected parts of horses dealing with ringworm should be clipped and the clippings burned, but unfortunately, as a result of insufficient necessary supplies, this was an immensely challenging task to perform.¹²⁷ The animals further needed to be washed with disinfectant and were to have iodine applied, if available, with paraffin or soft soap to the spots.¹²⁸ Unfortunately, as Lieutenant Savage complained, medicines were frequently ineffective and difficult to obtain, making such methods of rehabilitative care nearly impossible, particularly early in the war.¹²⁹ Further, animals were also exposed to what was termed Epizootic Lymphangitis, a condition that produced “sores similar to and in similar situation to Farcy,”

¹²⁵ “War Diaries - Deputy Assistant Director of Veterinary Services, 1st Canadian Division”, *Library and Archives Canada* RG9-III-D-3, Volume 5042 File 885, February 1915, p. 14.

¹²⁶ Andrew McEwan, “Maintaining the Mobility of the Corps:” Horses, Mules, and the Canadian Army Veterinary Corps in the Great War”, Doctoral Thesis, University of Calgary (2016), 155.

¹²⁷ “Official Field Service Pocket Book of 1914 Veterinary Service (UK)”, *H.M. Stationary Office* (1914): Article 6.

¹²⁸ *Ibid*, Article 6.

¹²⁹ Marguerite Helmers, “Fortunino Matania’s Goodbye, Old Man”, in *Portraits of Remembrance: Painting, Memory, and the First World War* edited by Margaret Hutchison and Steven Trout (Tuscaloosa: The University of Alabama Press, 2020), 204.

which is the skin form of glanders, an infectious disease that primarily targeted equines.¹³⁰ This skin condition originated from a wound left untreated, from which point cord-like swellings would appear and on the course of which these sores formed.¹³¹ This was another highly infectious disease that wreaked havoc on equine supply.

With so many skin diseases being so prevalent in equines tied to the BEF troops, veterinary staff were constantly brainstorming on ways to prevent devastation from such seemingly preventable conditions. One of the primary ways to prevent the spread of mange and other diseases was through the implementation of proper grooming, the effects of which, it was noted, could prevent further cases. Horse grooming has a long history and has been traditionally emphasized as of the utmost importance when caring for and maintaining horses, donkeys, and mules. In 1898, for example, the *Massachusetts Ploughman and New England Journal of Agriculture* published an article discussing the importance of this seemingly monotonous task. It stressed that the “necessity of regular currying, brushing and hard rubbing” for animals in the equine family was a vital aspect of care.¹³² Currying is an integral component of equine coat care and refers to the practice in which one uses a brush that has rows of ridges on it in circular motions on a horse’s body to loosen dirt and hair from the coat. This is important as it ensures that no mud and bacteria are permitted to stay in the coat and goes a long way in relieving any itching or discomfort for equines. It is especially vital to do prior to placing tack like saddles and bridles on to avoid this equipment rubbing against dirt and grime, causing further skin irritation. The article emphasized that, “if the farmer, when he brings his horses in at night, reeking with

¹³⁰ “Official Field Service Pocket Book of 1914 Veterinary Service (UK)”, *H.M. Stationary Office* (1914): Article 31.

¹³¹ *Ibid*, Article 31.

¹³² “The Horse: Grooming Horses”, *Massachusetts Ploughman and New England Journal of Agriculture* (1842-1906) April 2, 1898.

sweat, or drenched with rain or snow, thighs and belly covered with mud and the long hair of their legs full of dirt and wet” happened to neglect to clean them, he was not only committing “an act of cruelty” but also was entirely disregarding his own vital interests.¹³³ Further, this article emphasized the significance of the practice in preventing skin disease on equine legs, mentioning that the “failure to dry and cleanse the legs of a horse” in muddy conditions was directly equated with an increase in “troublesome and foul disease.”¹³⁴ Unfortunately, despite this earlier understanding of the importance of proper grooming practices in horse care, many in the First World War believed that horses were simply creatures of burden who required minimal care, leading those charged with their maintenance to pay little attention to this component of equine management. Soldiers frequently bypassed grooming as a waste of time, often further



Figure 7: “The Battle of the Somme, July-November 1916.”

While certainly it was difficult amongst the horrors and mayhem of the war to set aside sufficient time for something as seemingly monotonous as grooming horses, it was concluded that “nearly

abusing the animals they worked with by “modifying wagons in carts to carry more than they or their horse teams could handle,” leading to unnecessary and debilitating cuts on the skin of these animals.¹³⁵

¹³³ Ibid.

¹³⁴ Ibid.

¹³⁵ Tim Cook and Andrew Iarocci, “Animal Soldiers,” *Canada’s History* 93, no. 5 October 2013, p. 20-27.

every case of skin disease” presented at the front could be traced back to the “want of proper grooming.”¹³⁶ Veterinary officers doing routine checks of the horses designated to individual units were often faced with the sad reality that many of the animals were horrifically dirty, with the horses particularly looking incredibly depleted. Despite concern expressed to officers of these units, this most rudimentary factor in horse care often went under-appreciated and even ignored.

Had more attention been paid to this aspect of equine management early in the war, far fewer horses would have been afflicted with conditions such as mange. Individuals such as Major Charles Long, Adjutant for the DAC, wrote that “fault was held with some” horses associated with individual units because they were so severely “badly groomed”.¹³⁷ Lieutenant Savage also expressed his concern and in fact frustrations with this absolute negligence, stating in his diary that he had been “ordered to lecture all Batteries on grooming” and noting that they needed to implement a “course in practical Equitation for the officers” as well as some “NCO’s who [could] make the men work” to correct lack of attention paid to this simple aspect of equine care.¹³⁸ As veterinary units increasingly expressed concern over lack of grooming, commenting frequently on the “remarkable number of Debility Cases” plaguing the hospitals that could be connected back to this lack of action taken, more units sought to pick up their brushes in order to minimize unnecessary equine illness and loss.¹³⁹ Unfortunately, despite the increased attention paid to this aspect of animal care, little could be done at this point in the war. There was an insufficient supply of grooming gear, with brushes being reported “by many units as difficult to

¹³⁶ “War Diaries - No. 1 Canadian Mobile Veterinary Section”, *Library and Archives Canada* RG9-III-D-3, Volume 5043 File 890, 1918.

¹³⁷ Andrew McEwan, “Maintaining the Mobility of the Corps:” Horses, Mules, and the Canadian Army Veterinary Corps in the Great War”, Doctoral Thesis, University of Calgary (2016), 151.

¹³⁸ Lorraine Jordens, “Diary of a World War One Veterinary Officer”, *Can Vet Journal* Volume 28 (1987), 276.

¹³⁹ “War Diaries - No. 1 Canadian Mobile Veterinary Section”, *Library and Archives Canada* RG9-III-D-3, Volume 5043 File 890, 1918.

obtain.”¹⁴⁰ Lieutenant Savage expressed his concern over this too, writing in his diary his complaints that grooming supplies were inadequate.¹⁴¹ Without the ability to access sufficient supplies, units who increasingly understood that they needed to groom their horses could not do so and therefore struggled to keep skin diseases at bay.

Another way to make grooming ultimately easier and attempt to eradicate “or at least curb the parasite causing mange” was clipping long winter hair from the animals.¹⁴² In theory, this solution was commendable, allowing horses to dry more quickly and minimizing the difficulty of grooming the long and thick winter coats of horses. However, in practice, this solution served to create more problems. Clipping supplies were also inadequate and the process of clipping and scrubbing all of the animals impacted by skin diseases was found to be “damn slow work,” making it impossible to successfully clip all animals and subsequently help alleviate the spread of diseases.¹⁴³ Units were often not supplied new clipper blades and they did not have access to sufficient supplies to sharpen their own, making the dull clippers not only useless but also dangerous since they were prone to causing further irritation for the animals. Borrowed clipping machines were sometimes accessed but were often found inoperable because repairs were not prioritized.¹⁴⁴ As a result, there was an insufficient number of clipping machines for the number of horses that required clipping. Even those animals who were successfully clipped faced horrific effects. Those clipped required blanketing to help them to keep warm and protected from the elements without their thick winter coats. Blankets were difficult to come by at the Western

¹⁴⁰ Andrew McEwan, “Maintaining the Mobility of the Corps:” Horses, Mules, and the Canadian Army Veterinary Corps in the Great War”, Doctoral Thesis, University of Calgary (2016), 160.

¹⁴¹ Marguerite Helmers, “Fortunino Matania’s Goodbye, Old Man”, in *Portraits of Remembrance: Painting, Memory, and the First World War* edited by Margaret Hutchison and Steven Trout (Tuscaloosa: The University of Alabama Press, 2020), 204.

¹⁴² Lorraine Jordens, “Diary of a World War One Veterinary Officer”, *Can Vet Journal* Volume 28 (1987), 275

¹⁴³ *Ibid*, 275.

¹⁴⁴ *Ibid*, 275-76.

Front which meant that most clipped animals were not offered sufficient blanketing, leading to an increase in cases of disease like pneumonia caused by exposure to the elements. This further served to decimate vital equine troops. While veterinary staff worked hard early in the war to curb mange's ravages when it was realized how debilitating the condition was, going so far as to lecture battalions as Savage did with the 41st, 44th, and 46th Batteries, the parasitic disease and many others continued to spread through the BEF horses for quite some time, wreaking havoc.¹⁴⁵ The situation at this point was looking hopeless, particularly for the equines who continued to fall victim to the ravages of these diseases.

The situation regarding equine skin diseases was not all bad however. Fortunately, thanks to hardworking veterinary units and a realization that something needed to be done to curb the effects of diseases like mange, major advancements were made in this aspect of equine care. Veterinary hospitals grew progressively more advanced in their chosen methods of care and developed new solutions to limit detrimental conditions like mange. Perhaps the most groundbreaking of all of these advancements was the employment of the dip or bath in a solution of sulphur, unbaked lime and water which took place at veterinary hospitals behind the lines. This came as a huge improvement over the previous clipping and scrubbing method which was both time-consuming and not entirely foolproof. The dip tank was a rectangular hole in the earth, lined with planks and waterproofed from top to bottom. The solution was poured in large quantities into these tanks and then horses and mules were turned loose and persuaded down the narrow chute leading to the in ramp. From there, they walked down the ramp into the holding tank, submerging themselves in the solution before swimming to the exit ramp and walking out to holding corrals to dry.¹⁴⁶ The number of baths needed for each animal was determined by the

¹⁴⁵ Ibid, 276.

¹⁴⁶ Ibid, 276.

severity of the case and treatment could last anywhere from four days to two weeks, but this was a step in the right direction towards making recovery plans for afflicted animals much more efficient. Since the skin with mange cases became thickened and corrugated, this bath also served to soothe the discomfort that the animals were undoubtedly experiencing.¹⁴⁷ Dip tanks



Figure 8: “Horses going through a bath containing liquid which prevents skin disease. September, 1917.”

were a fast and effective mange prevention treatment used for thousands of animals and are still used to some degree today, although now the lime and sulphur is typically combined into a shampoo to apply as opposed to being poured into a holding tank.

As the benefits of these baths were seen, veterinary units came to use them more frequently. They were often “given without stint” and the least signs of itchiness in any equine were sufficient to cause its hasty submersion into the tank.¹⁴⁸ Typically, every third day, 400 gallons of fresh dip solution were put into the vat and every tenth day it was emptied to be cleaned. One thousand horses could be accommodated in one vat per day and some units even had access to two vats.¹⁴⁹ This allowed a large number of animals to be treated in a shorter period of time, increasing the rapidity of turnover for treated animals back to the frontlines.

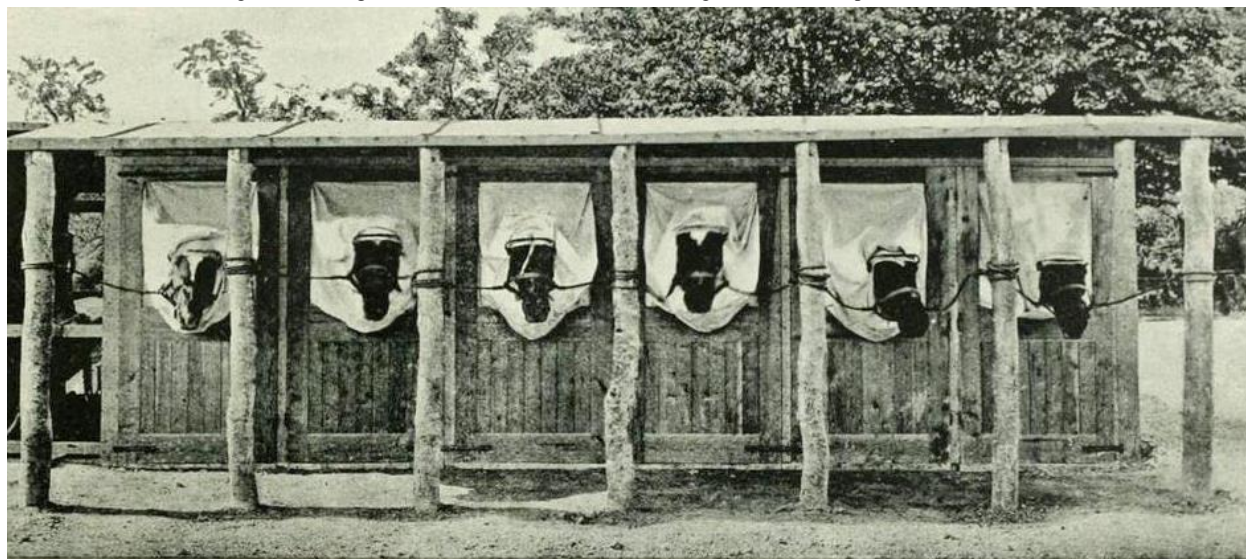
¹⁴⁷ Department of Agriculture Ottawa, *Health of Animals: Mange in Horses and Cattle* Bulletin No. 12, (Ottawa: Published by Authority of the Minister of Agriculture, 1911), 4.

¹⁴⁸ “War Diaries - Assistant Director of Veterinary Services, Canadian Corps,” *Library and Archives Canada* RG9-III-D-3, Volume 5042 File 884, 1917, p. 19.

¹⁴⁹ “Injuries and Diseases”, *The United State’s World War One Centennial Commission: Brooke USA Horse Heroes*, Accessed February 2022.

Lime and sulphur baths were not the only solution in resolving skin disease. Fumigation chambers were also employed against mange and as a means to disinfect all blankets and other tack that had been in close contact with affected animals. These chambers were startling to see and were quite revolutionary, serving a significant purpose in increasing the efficiency of veterinary units in caring for equine patients. A sulphur dust was pumped into the chambers, completely coating the animal apart from the head which stuck out through a cloth sleeve in

Figure 9: "Fumigation chamber for the treatment of mange at a British hospital in France."



Horses being treated for mange in gas chambers with only their heads exposed.

order to protect their sensitive eyes, ears, and noses.¹⁵⁰ The head had to be treated by hand but in distributing treatment in such a way, more animals could be helped in any given period of time, ensuring quicker recovery and allowing equines to more rapidly return to the frontlines.

Alongside these shifts in rehabilitation, veterinarians also put out booklets to all units that detailed how to treat common ailments of the skin using medicines available. For animals who were clipped early in their recovery from mange, the clippings were to be burned and the animals were to be dressed all over with a mixture of pink paraffin, a pound of soap, and a gallon of water. Regular exercise was encouraged to keep the animals moving and air circulating around

¹⁵⁰ Ibid.

them and it was suggested that dressings had to be redone every third day to maximize the effectiveness of this solution.¹⁵¹ In handing out such material which detailed effective protocol for dealing with these equine ailments, the effectiveness of veterinary units could be increased. This, amongst other similar improvements, reflected a broader process of learning and professionalism in this field.

In contrast to these more advanced and medically backed solutions that could be administered by trained veterinary units, the most common method for treating conditions of the skin was quite simply proper grooming. With countless lessons and lectures being offered to educate troops tasked with equine care, it could be “impressed on men concerned that good grooming [was] essential to the horses’ welfare reducing animal sickness 75%,” and veterinarians such as Lieutenant Savage could encourage an increased emphasis on this most basic form of equine care.¹⁵² Proper grooming meant that filthy animals were not allowed to sit in this state for long, ensuring loose dirt was scraped off and verifying that the coat was clean and well-maintained. Closer attention paid to the practice was encouraged in soldiers who were facing daily horrors that put them on edge and wrecked their nerves. They discovered that grooming offered some relief and the resulting companionship helped to keep soldiers going. Since the animals and men were found to have a relationship of mutual reliance, the horse relying on man for care and the man relying on the horse for transport purposes, more attention was comfortably paid to grooming. This helped to ensure equine coats were more sufficiently maintained, the positive results of which were evident. By March 1918, the Canadian Corps found themselves experiencing another routine winter’s month on the Western Front but it was

¹⁵¹ “Official Field Service Pocket Book of 1914 Veterinary Service (UK)”, *H.M. Stationary Office* (1914): Article 7.

¹⁵² “War Diaries - No. 1 Canadian Mobile Veterinary Section”, *Library and Archives Canada* RG9-III-D-3, Volume 5043 File 890, 1918.

found that the mange outbreak of previous months was actually well under control, and the animals remained largely healthy. On his routine inspections of the 3rd Canadian Division units, Colonel D.S. Tamblyn even observed that, “generally speaking, all animals were in fair physical condition and grooming” was found to be quite satisfactory.¹⁵³ Tamblyn further recalled seeing “grooming carried out with regularity” especially during dry weather as a “preventative against skin diseases.”¹⁵⁴ Since mange and other such conditions were a great concern for veterinarians, every precaution came to be taken to combat it, including something as seemingly insignificant as grooming.

The final measure taken to limit detrimental impacts of conditions like mange was the emphasis placed on proper protocol when dealing with skin diseases. Previously, due to limited space and a naivety surrounding the overall affects of permitting something like mange to spread, animals were often confined to small spaces and mixed haphazardly together. This served to increase mange cases as those animals which had the disease could rapidly pass it on to those who did not. As it was realized how serious the situation was, greater emphasis was placed on limiting contact between healthy and unhealthy animals. Afflicted animals were sent immediately to hospitals which often had designated areas set aside for the sole purpose of housing and healing mange cases. They were isolated with their equipment to prevent the use of such material on healthy animals and the men caring for them were advised to stay away from those not affected.¹⁵⁵ Thus, different groups were sent to deal with issues such as skin disease while other veterinarians worked on curing ailments like injuries and abrasions. This helped to

¹⁵³ Andrew McEwan, “Maintaining the Mobility of the Corps:” *Horses, Mules, and the Canadian Army Veterinary Corps in the Great War*, Doctoral Thesis, University of Calgary (2016), 383.

¹⁵⁴ Lieutenant-Colonel D.S. Tamblyn, *“The Horse in War” and Famous Canadian War Horses*, (Kingston: Jackson Press, 1920), p.41.

¹⁵⁵ “Official Field Service Pocket Book of 1914 Veterinary Service (UK)”, *H.M. Stationary Office* (1914): Article 7.

stop the spread of mange, keeping the animals afflicted to a manageable minimum. Further, stables, utensils, harnesses, and anything else that the animals may have come in contact with were disinfected and the animals were frequently picketed out in the open so they could receive proper air circulation and limit the air in stables from becoming stagnant and riddled with the parasitic mites associated with conditions like mange.¹⁵⁶ Despite the alarming possibilities of skin diseases seen earlier in the war, it has to be noted that it is to the “distinct credit” of veterinary officers of BEF units that mange’s ravages were held in check and “confined to a comparative minimum.”¹⁵⁷

There is little doubt that advancements were made in this realm of war equine care and management throughout the First World War but the true motivations behind them must be considered. While from afar it may appear as though an increased emphasis on proper grooming and skin disease prevention techniques were to the complete benefit of the animals and such efforts were made to reduce discomfort for them, this is a problematic assumption. While certainly some soldiers engaged in grooming as a bonding experience between themselves and their horses, the practice was prioritized by higher command out of necessity. Keeping the animals as clean as the situation allowed preserved the animals primarily for continued labour towards the war effort and further acted as a means to demonstrate “good leadership and firm discipline.”¹⁵⁸ Further, grooming was only strongly encouraged to some degree when it was recognized how difficult it was to obtain new equine stock if existing BEF horses, donkeys, and mules perished in the fight. As the war progressed and conditions for some horses certainly

¹⁵⁶ Ibid, Article 7.

¹⁵⁷ “War Diaries - Assistant Director of Veterinary Services, Canadian Corps,” *Library and Archives Canada* RG9-III-D-3, Volume 5042 File 884, 1917, p. 19.

¹⁵⁸ Andrew McEwan, “‘Maintaining the Mobility of the Corps:’ Horses, Mules, and the Canadian Army Veterinary Corps in the Great War”, Doctoral Thesis, University of Calgary (2016), 312.

improved, there continued to be major issues in this aspect of equine care. Veterinary staff like Alfred Savage grew increasingly frustrated with the lack of common sense and good horsemanship in the men fighting in the First World War even later into the conflict, suggesting that changes were made not because animals were living beings deserving of sufficient care but rather that the animals were important to the war effort and needed to be preserved to prevent catastrophic transportation concerns.¹⁵⁹ The shift towards increased emphasis on grooming as a



Scourged with mange, half starved, overworked, then turned into a corral knee-deep in mud to recuperate in the wind and sleet of winter, was the fate of thousands of army animals in the A. E. F.

Figure 10: A horse struggling with mange at the front during the First World War.

means to prevent mange and other similar issues with the skin was prioritized primarily out of, as veterinary units admitted, necessity¹⁶⁰ since the animals were so essential for troop and supply movement in the Great War.¹⁶¹ Given that nothing moved “that didn’t have a horse attached,” without these animals troops were made vulnerable and were at higher risk of facing heavy losses at the hands of their enemies.¹⁶²

¹⁵⁹ Ibid, 93.

¹⁶⁰ “War Diaries - Assistant Director of Veterinary Services, Canadian Corps,” *Library and Archives Canada* RG9-III-D-3, Volume 5042 File 884, 1917, p. 2.

¹⁶¹ Stephen Wynn & Tanya Wynn, *Animals in the Great War* (Pen & Sword Books Limited, 2019), p. 108.

¹⁶² Jane Flynn, *Soldiers and Their Horses: Sense, Sentimentality and the Soldier Horse Relationship in the Great War*, (New York: Routledge, 2020), p. 33.

As well, while clipping was, in theory, a relatively easy solution that helped to reduce cases of skin disease and ensure those inflicted could beat conditions like mange more rapidly, in practice it frequently caused more issues than it solved, further suggesting that these advancements were made less to the benefit of the animals because they were living beings but rather as cheap and easy fixes to a problem that could otherwise become very expensive. With insufficient blanket supplies for all clipped animals, many horses succumbed to pneumonia and other exposure-related illnesses that had the potential to cut their lives short. In as late as February 1917, due to a continuation of clipping winter coats in deplorable weather despite the introduction of dip tanks, in one week more horses were reported to have died of pneumonia and the awful open-line living conditions than in the previous six months.¹⁶³ Savage recalled being confronted with more cases of pneumonia than he could count and found himself constantly draining lungs, some of which collapsed, as well as dealing with elevated temperatures, wounds and abscesses.¹⁶⁴ Even when the animals were granted access to blankets, these were often filthy, further exposing the horses to horrific skin conditions when such blankets rubbed on their unprotected skin. Further, because these animals were so frequently turned out together in tight quarters, disputes between them often resulted in ripped blankets, not only rendering them useless for the animals that needed them but also becoming a tripping hazard thanks to the loose straps and holes that their feet could be caught in. Thus, while clipping horses, donkeys, and mules was employed as an effort to reduce losses caused by conditions like mange, this was merely a shortcut solution that often caused more problems than it actually helped to solve. Even when clipping helped the animals, efforts made to correct early shortcomings only came well after the cost of equine losses was realized. If horses were to be killed, it was increasingly

¹⁶³ Lorraine Jordens, "Diary of a World War One Veterinary Officer", *Can Vet Journal* Volume 28 (1987), 276.

¹⁶⁴ *Ibid*, 277.

imagined, it should be a result of enemy action, not through avoidable ill-treatment and “bad management.”¹⁶⁵

How effective these methods truly were at the time must also be questioned. While certainly in some cases animals were healed from their skin diseases more rapidly than before and while some veterinarians grew increasingly impressed by the condition of the horses of the British and American Expeditionary Forces, this in no way solved the problem in its entirety. As late as August 31, 1918, mange was still an issue. There were approximately 19,316 cases of mange noted in the American Expeditionary Force’s animals, which represented about 27% of the animals on American sick reports from the time. This figure actually grew to 30,736 cases by March 1, 1919 or about 62% of all sick animals.¹⁶⁶ This suggests that while these solutions were being raised, they were not entirely sufficient in limiting debility cases in horses due to skin diseases. It further points to the fact that grooming and other methods of prevention were not being carried out with as much regularity as was suggested, especially after the war had already drawn to a close and the immediate threat of lack of transportation was virtually eliminated. This was not just a continued concern for American troops. The Canadian Corps had an animal loss wastage percentage rate, meaning animals who perished at the Western Front, of 56%, which seems quite high but was actually deemed as a favourable rate owing to the fact that the total Allied armies had a much higher equine wastage rate of 75%. This meant that 75% of the total number of horses in the Allied armies lost their lives due to injury and illness.¹⁶⁷ This is particularly staggering when considering the fact that human wastage, being defined as the death

¹⁶⁵ Jane Flynn, *Soldiers and Their Horses: Sense, Sentimentality and the Soldier Horse Relationship in the Great War*, (New York: Routledge, 2020), p. 26.

¹⁶⁶ “Injuries and Diseases”, *The United State’s World War One Centennial Commission: Brooke USA Horse Heroes*, Accessed February 2022.

¹⁶⁷ Lorraine Jordens, “Diary of a World War One Veterinary Officer”, *Can Vet Journal* Volume 28 (1987), 279.

of soldiers in the trenches outside of formal battles, in Canadian units was estimated at around 10 percent per month, meaning that 80 soldiers were estimated to be killed or incapacitated in 800-strong infantry units.¹⁶⁸ Further, Savage wrote on August 3, 1917, three years into the war, that “about 281,000 War Horses in [the] BEF [were] dying of neglect” and that, in an effort to mark this issue, they were instructed that horses had to be under cover as much as possible, although it did little to stop the spread of mange.¹⁶⁹ Further, while it was supposedly increasingly impressed upon men involved in equine care at the Western Front that every precaution had to be taken to limit loss of animals due to skin disease, there still existed a shocking degree of ignorance when it came to their care. Many soldiers continued to be unaware of the effects poor coat care could have on the animals. It must also be noted that even some of the medical advancements made towards improving skin conditions for horses, donkeys, and mules were not prioritized as a means to protect these animals because they were living and breathing. While veterinary staff certainly pushed things like Lyme and sulphur baths as a means to improve equine condition, when it came down to it and as more methods were suggested, commanders often ignored or quickly silenced those raising ingenious new solutions when they seemed to be too time-consuming or costly. Savage wrote a report on January 30, 1918 on his use of “chloral hydrate as an anesthetic for animals that could not tolerate chloroform,” many of which could not.¹⁷⁰ The idea was impressive for the time and would have limited equine losses when in surgery, sometimes for skin conditions. Unfortunately, he rapidly received feedback suggesting that there was no merit in his findings. His hard work was quickly brushed aside despite the fact that it would have limited a great deal of suffering for the animals. Any changes made were relatively

¹⁶⁸ “Canada and the First World War: Trench Routine”, *Canadian War Museum*, Accessed May 2022, <https://www.warmuseum.ca/firstworldwar/history/life-at-the-front/trench-conditions/trench-routine/>

¹⁶⁹ *Ibid*, 277.

¹⁷⁰ *Ibid*, 278.

minor and were made because animal losses “could have seriously jeopardized...mobility, transport, and supplies.”¹⁷¹ This further demonstrates that any advancements made were typically a selfish means to limit equine losses that might have detrimental impacts on transportation rather than as a result of an increased awareness of animal welfare.

¹⁷¹ Ibid, 279.

Chapter 3: You Can Lead a Horse to Water

Properly managing equine health is a challenging and time-consuming process. Despite the fact that horses are very large and strong animals, their anatomy is uniquely designed and they require very specific care in order to thrive in their environments. Of particular concern is properly feeding and watering these animals. While it may seem sufficient to offer them occasional blades of grass and some oats, supplying horses with adequate nutrition requires a lot more knowledge and understanding. Horses are non-ruminant herbivores meaning that they only digest their food in one stomach.¹⁷² As well, these animals are considered to be hind-gut fermenters which means that all fermentation of plant fibre happens in the cecum or the colon.¹⁷³ Considering their immense size, horses tend to have relatively small stomachs, only having a capacity of two to four gallons for an average sized horse of 1,000 lbs. Within the stomach, hydrochloric acid and pepsin is secreted to breakdown food that enters this sensitive structure.¹⁷⁴ If insufficient food supply is offered to these animals and their stomachs are permitted to be empty for long periods of time, gastric ulcers can easily form which are often debilitating for the animals and require veterinary care and medicine. Gastric ulcers are a result of the erosion of the stomach lining due to prolonged exposure to normal acids in the stomach. The condition is incredibly common, affecting up to 90% of racehorses and 60% of show horses.¹⁷⁵ In an effort to prevent the onset of conditions like these, a good understanding of the equine digestive system needs to be achieved and sufficient access to the six basic nutrients that horses need in order to

¹⁷² “Non-Ruminant Nutrition”, *Ferguson College of Agriculture: Oklahoma State University*, Accessed February 26, 2022.

¹⁷³ Carole Knight and Lucy Ray, “Understanding a horse’s digestive system”, *UGA Forage Extension Team*, September 2018.

¹⁷⁴ Carey A. Williams, “The Basics of Equine Nutrition”, *Rutgers New Jersey Agriculture Experiment Station*, April 2004.

¹⁷⁵ Frank M. Andrews, “Gastric Ulcers in Horses”, *Merck Manual Veterinary Manual*, Last Modified June 2016.

thrive must be offered: carbohydrates, proteins, fats, vitamins, minerals, and water.¹⁷⁶ If too many bulky foods are offered or if toxic articles are ingested, the impact on these animals can be devastating. Due to their unique gastrointestinal tract, horses cannot regurgitate food and therefore cannot bring anything that they cannot digest back up through their digestive systems, something that makes them prone to colon impaction. This condition is common in these animals, contributing to the onset of colic, essentially a serious stomachache that frequently requires veterinary assistance and in serious cases can result in death.¹⁷⁷

Due to the fact that an equine's gastrointestinal system is so delicate, formulating sufficient feeding programs for horses, donkeys, and mules is no easy task. Within their specific nutritional requirements are certain rules that need to be followed to maximize equine health and limit the onset of life-threatening conditions. For example, while horses do need fats in their diets, they do not have a gall bladder which makes high fat diets hard to digest. Horses can digest up to 20% fat in their diet but it takes a span of 3-4 weeks for them to adjust to this level of fat content and so minimal intake of fats is recommended.¹⁷⁸ Further, they need to be offered a sufficient supply of fibre in order to maintain good digestive function. The majority of fibre in their diets comes from access to grazing, a practice that equines have been engaging in for millions of years, leading to the development of high-crowned molars which allow them to properly pick off and chew blades of grass from the ground.¹⁷⁹ While it would then be easy to suggest that horses be offered unlimited access to grazing pastures, this is also problematic. These animals have to be carefully monitored when grazing because access to too much grass

¹⁷⁶ Kylee J. Duberstein and Edward L. Johnson, "How to Feed a Horse: Understanding Basic Principles of Horse Nutrition", *UGA Cooperative Extension Bulletin 1355*, Reviewed July 2015.

¹⁷⁷ Karen Waite, "Impaction colic in horses", *Michigan State University Extension*, August 3, 2015.

¹⁷⁸ Carey A. Williams, "The Basics of Equine Nutrition", *Rutgers New Jersey Agriculture Experiment Station*, April 2004.

¹⁷⁹ Matthew C. Muhlbachler, Florent Rivals, Nikos Solounias, Gina M. Semprebon, "Dietary Change and Evolution of Horses in North America", *Science* 331, no. 6021 (2011): 1178-81.

can contribute to the onset of conditions like laminitis or founder, the disruption of blood flow to the sensitive and insensitive laminae in the foot which secures the coffin bone to the hoof wall.¹⁸⁰ This condition causes extreme pain in the animals and often necessitates their destruction. Given that laminitis is most commonly a result of insufficient feeding programs, ensuring that adequate nutrients are offered without offering too much is a fine balance that needs to be met in order to ensure that horses are kept healthy.

Where grass is limited or unavailable, other forms of roughage must also be offered. Horses need to be offered no less than 1% of their body weight in roughage in the form of hay per day. This means that a 1,100 pound animal requires a minimum of eleven pounds of roughage everyday.¹⁸¹ Any hay that is offered to these animals needs to be of good quality to ensure that proper nutrition is achieved. It is recommended by veterinarians that hay for equines be “bright green, leafy and fine-textured, with a fresh, pleasant aroma.”¹⁸² Dust needs to be minimal so that no respiratory conditions are developed while eating. Of most benefit to these animals is hay that has a high content of alfalfa. Being one of the first domesticated forages, alfalfa has a long history, having been planted and harvested several thousands of years ago in what is now Iraq, Iran, and Afghanistan. In fact, the “main feed for horses of early armies in those regions was alfalfa” and troops who relied heavily on their horses for movement and combat purposes as a result relied on sufficient growth and harvest of this particular crop.¹⁸³ When alfalfa was brought to the United States in the 1700s from Europe, it struggled to survive in the wetter soils and lower pH levels that hindered its ability to thrive. However, it was later

¹⁸⁰ “Laminitis: Prevention & Treatment”, *American Association of Equine Practitioners* (Accessed February 2022), <https://aaep.org/horsehealth/laminitis-prevention-treatment>.

¹⁸¹ “Feeding Horses”, *PennState Extension*, December 2015, <https://extension.psu.edu/feeding-horses>.

¹⁸² *Ibid.*

¹⁸³ Heather Smith Thomas, “All About Feeding Horses Alfalfa”, *University of Kentucky: College of Agriculture, Food and Environment* (Accessed February 17, 2022), <http://equine.ca.uky.edu/news-story/all-about-feeding-horses-alfalfa>.

found that when settlers brought the plant west in the 1800s during the California Gold Rush, it actually did quite well. By the late 1800s and early 1900s, those charged with equine care began to learn more about the benefits of adding lime to lower pH soils to make them appropriate for growing crops like alfalfa.¹⁸⁴ Since the plant grows best in well-drained soils rather than wet soils, care for this particular food supply is as difficult as feeding the animals themselves. When alfalfa hay is fed, it must be done so in certain conditions to maximize its effectiveness. Hay needs to be placed on dry ground wherever possible and away from sand, to prevent the ingestion of such a material which can contribute to a higher degree of intestinal blockages. As well, a sufficient number of piles of hay need to be spread out equivalent to the number of horses in the field to avoid fighting over food and therefore to limit the potential of gastric ulcers from stress.

In addition to access to hay and grass, many horse owners also feed their horses a balance of grain and other supplements to ensure that all nutritional requirements are met for their animals. While grains are not always required, animals who are in consistent work are typically placed on varying degrees of it to offer them proper vitamins and nutrients to maintain this higher workload. In configuring a grain-based diet that works for each individual animal, many considerations need to be addressed. If too much grain is offered to the animals at once, digestive upset can be caused which can contribute to the onset of conditions like colic. As well, some horses are allergic to or intolerant of certain grains which means that owners need to be cognizant of how their animals react to new foods. Supplements are often added to grains, the most common being arthritic supplements, probiotics, and electrolytes which help to encourage the animals to drink more water, therefore preventing dehydration. When grain is added to a

¹⁸⁴ Ibid.

horse's diet or if an animal needs to be taken off of grain, these shifts need to be made gradually to limit the onset of ulcers and to ensure that no further gastrointestinal upset occurs. Certain grains have to be watered before feeding and others need to be fed with specific protocols in mind to prevent the onset of any potentially life-threatening conditions. Horses are not only prone to colic but can also fall victim to choking. Inhaling food too quickly or poor chewing can result in food being swallowed as large masses that become lodged in their throats, causing pain as it is forced down into the stomach.¹⁸⁵ Unable to bring the food back up, many horses experiencing choke will show signs like those seen with colic, namely sweating, pawing the ground, and straining to defecate. Any and all food that is offered to these animals needs to be done ideally at the same time every day and an hour must be left between heavy work and feeding to avoid any obstructions from occurring.

These animals also need constant access to fresh and clean drinking water. Without sufficient access to proper drinking water, horses can only live three to six days, a short period when compared to the twenty to twenty-five days that they can survive without food.¹⁸⁶ Given the delicate nature of a horse's gastrointestinal tract, water is vital in ensuring that digested food can be properly moved throughout the body and to verify that no blockages take place. Horses tend to drink about two quarts of water for every pound of hay that they consume, amounting to somewhere near 5-10 gallons per day.¹⁸⁷ Horses have been known to be picky with their water as well, oftentimes turning their noses up at any water that has an unfamiliar or suspicious smell to it. To further complicate things, water cannot be offered freely at all times. If they are too warm

¹⁸⁵ Susan Novak and Anna Kate Shoveller, *Nutrition and Feeding Management for Horse Owners* (Alberta: Alberta Agriculture and Rural Development, 2008), 6.

¹⁸⁶ "How Much Drinking Water Does Your Horse Need?", *PennState Extension*, June 26, 2014, <https://extension.psu.edu/how-much-drinking-water-does-your-horse-need>.

¹⁸⁷ *Ibid.*

from working or from enduring harsh weather conditions, water needs to be offered to them very slowly. Given the fact that a horse's stomach is so small for their bodies, it can fill up fairly quickly. When a horse has been worked hard, "his stomach and intestines temporarily shut down while blood flow is shifted to the heart and lungs."¹⁸⁸ If water is offered in too high a quantity too quickly after exercise, their stomachs will be too full and since they are unable to regurgitate food, they can rapidly become ill. Water has to be offered in small amounts every twenty minutes after heavy exercise and then offered freely only after the animal has fully cooled down.¹⁸⁹

Given how many strict requirements go into sufficiently feeding and watering equines, there is little wonder as to how caring for equine soldiers in the First World War became such a challenge for BEF troops at the Western Front. In fact, the most prominent concern for veterinarians and soldiers assigned with daily equine care was feeding them, and horse fodder rapidly came to be the largest single item shipped across the English Channel during the war.¹⁹⁰ It was determined early in the war that British equines should be given access to 9-13 pounds of oats per day along with 10-16 pounds of



Figure 11: "Canadian Artillery getting fodder from a forage dump for their horses. May, 1918."

¹⁸⁸ Anthony Blikslager, "Offering a Horse Water After Exercise", *Equus*, July 6, 2021.

¹⁸⁹ Ibid.

¹⁹⁰ Stephen Wynn and Tanya Wynn, *Animals in the Great War* (Havertown: Pen & Sword Books Limited, 2019), 38.

hay and 3-14 pounds of maize.¹⁹¹ Unfortunately, this was difficult to achieve given the expense, wartime rations and shortages at the time. The cost of feeding equine soldiers was incredibly high, far higher than feeding the average human soldier because, as a rule of thumb, horses were to be offered ten times as much food by weight compared to their human comrades. The cost of feeding each equine soldier in the First World War was estimated at \$1.57 per day per horse, amounting to about \$27.68 now, an astronomical amount given the tumultuous period through which they were living.¹⁹² To compare, it was estimated that it cost around 26 cents per day to feed one soldier throughout the duration of the First World War.¹⁹³ Alongside the financial challenge that had to be overcome in order to properly feed equine soldiers, shortages were common resulting in frequent suffering from starvation and want of food. German U-boat attacks in open water and challenges in shipping at the time made access to hay and oat supply even more difficult for forces and Britain as a result had to ration the amount of feed that each horse was given. It is not known if Germany had realized that cutting off the supply of horse feed this way would reduce the overall effectiveness of British forces, “but intentionally or otherwise” that is what happened when Germany continued its “policy of unrestricted submarine warfare in February of 1917.”¹⁹⁴ In times of severe hardship, the animals were given entirely inadequate amounts of food especially when considering the tasks asked of them: only eight pounds of hay and ten pounds of oats, which spelled gradual starvation for many.¹⁹⁵

¹⁹¹ “The Veterinary Corps: Caring and Curing”, *The United States World War One Centennial Commission*, Accessed January 2022, <https://www.worldwar1centennial.org/index.php/brookeusa-veterinary-corps.HTML>.

¹⁹² “Care and Feeding”, *Brooke USA: Horse Heroes via The United States World War One Centennial Commission* (Accessed January 2022) <https://www.worldwar1centennial.org/index.php/care-and-feeding.html>.

¹⁹³ “World War I Rations: Full Belly, Fully Ready”, *Army Heritage Center Foundation*, Accessed May 2022, <https://www.armyheritage.org/soldiers-stories-information/world-war-i-ration-full-belly-fully-ready/>.

¹⁹⁴ Stephen Wynn and Tanya Wynn, *Animals in the Great War* (Havertown: Pen & Sword Books Limited, 2019), 38.

¹⁹⁵ Lorraine Jordens, “Diary of a World War One Veterinary Officer”, *Can Vet J* Volume 28 (1987), 276.

While the BEF troops were not the only ones struggling to sufficiently feed their equines (German horses also suffered shortages due to the fact that those “responsible for the pre-war stockpiling of their animal feed for military purposes miscalculated the amount needed”), these challenges put BEF horses in a precarious position.¹⁹⁶ It was found that horses picketed out in the open, particularly in winter months, left standing in mud over the fetlocks rapidly lost condition and succumbed to lung and digestive troubles which decimated their numbers. With consistent sudden changes to their environment and shifts being constantly made to their feeding regimes and routines, veterinary staff struggled to maintain proper physical and mental health in the animals. As winter temperatures persisted near 0 degrees Fahrenheit and snow accumulated, animals continued to endure “insufferable hardships and those who could no longer endure,” particularly those with many years of age to their credit who could not maintain their weight, succumbed and died.¹⁹⁷ As numbers were increasingly lost, officers and men charged with their care attempted to mend the situation but unfortunately a lack of proper education in this area of equine management proved a further obstacle in the way of properly feeding these animals. They failed to understand “feeding in the field and the use of indigenous forage such as maize, barley, and wheat”. Further, they often overfed, contributing to a rise in laminitis cases, or feared the disease and “failed to feed at all,” causing intense starvation.¹⁹⁸ Brigades facing great shortages of hay, as noted by the Deputy Assistant Director of Veterinary Services for the 1st Canadian Division in February 1915, tended to feed horses straw, a seemingly ingenious solution due to the fact that straw was more readily available, but harmful in practice.¹⁹⁹ Straw does not offer

¹⁹⁶ Stephen Wynn and Tanya Wynn, *Animals in the Great War* (Havertown: Pen & Sword Books Limited, 2019), 38.

¹⁹⁷ Lorraine Jordens, “Diary of a World War One Veterinary Officer”, *Can Vet J* Volume 28 (1987), 276.

¹⁹⁸ Steven J. Corvi, “Men of Mercy: The Evolution of the Royal Army Veterinary Corps and the Soldier-Horse Bond During the Great War”, *Journal of the Society for Army Historical Research* Vol. 76, No. 308 (1998), 274.

¹⁹⁹ “War Diaries - Deputy Assistant Director of Veterinary Services, 1st Canadian Division”, *Library and Archives Canada* RG9-III-D-3, Volume 5042 File 885 (February 1915), p. 14.

sufficient nutrition for horses and can be harder to digest, often contributing to choke and colic if too much is consumed. Veterinarians assigned to do checks on horses, donkeys, and mules associated with each unit frequently found that the animals were “in bad shape” and it was even predicted that there would be a few deaths each week.²⁰⁰ In veterinary diaries from early in the war particularly there is consistent concern over lack of sufficient feed supplies. Better hay and more of it was required and the horses were found to be looking “tucked up and were standing in deep mud.”²⁰¹ Even when the animals were granted access to sufficient food supply, further issues often arose. Since the horses were picketed out in the open and standing constantly amidst mud, hay that was provided was often trampled by the animals. In an attempt to mend this situation, horses were fed from hay-nets tied to breast-ropes but still trampled 50-70% of their hay into the mud. Further, 20% of their oats and other rations were tossed from nose bags and lost.²⁰² Thus, countless horses, donkeys, and mules succumbed to starvation at the Western Front and had to be destroyed.

Another concern must be noted here in regards to feeding equine soldiers throughout the First World War. Aside from the very obvious concerns over lack of sufficient food supplies for the animals, there were also instances of animals ingesting foreign objects that had the power to put them out of work for long periods of time if not permanently. Nails and other pieces of shrapnel often made their way into equine food at the Western Front and, with little attention paid to this concern, many horses perished or were severely injured from consuming such materials. Since horses do not have the ability to bring up foreign pieces due to the intricacies of

²⁰⁰ G.J. Stortz, “A Canadian Veterinarian Overseas in the First World War”, *Can. Vet. J.* 23 (June 1982), 183.

²⁰¹ “War Diaries - Deputy Assistant Director of Veterinary Services, 1st Canadian Division”, *Library and Archives Canada* RG9-III-D-3, Volume 5042 File 884 (February 1915), p. 15.

²⁰² Lt. Col. D.S. Tamblin, *The Horse in War and Famous Canadian War Horses* (Kingston: The Jackson Press, 1920), 21.

their digestive tracts, this was an incredibly dangerous problem. General John Edward Bernard Seely, previously the Secretary of State of War in the years preceding the First World War and a good friend of Winston Churchill's, reported that his horse Warrior swallowed a nail while eating his hay and began leaping about in his battered box like a mad thing. He was found to be "hurling himself into the air, falling on his back, jumping up again, lashing out with his hind legs, the air whistling as it does when one hits a really long drive with a golf club, and striking his forefeet at the wooden walls."²⁰³ Warrior luckily survived, returning to England after the war, but many others were not so lucky. Seely's story demonstrates how horrific consumption of nails and shrapnel was. This was of such concern to BEF troops that there grew amongst them a suspicion that the Germans were intentionally placing nails in feed in an effort to diminish the ability of equines to work, although this cannot be proven.²⁰⁴ Nails and shrapnel were not the only foreign objects commonly consumed. Equines, often left without sufficient rations of feed, often became so "ravenous for want of food" that they would turn to "eating their blankets in starvation," causing several to choke and would perish as a result.²⁰⁵ Veterinarians expressed great concern over this and Lieutenant Alfred Savage went so far as to predict a high rate of animal mortality after witnessing and noting in his diary that he had seen several horses die from ingesting large pieces of blankets.²⁰⁶ This represented a severe cause of animal loss especially early in the war.

Feeding horses was the not the only aspect of their care that was of major concern.

Providing the animals with sufficient access to clean drinking water was also a major obstacle.

²⁰³ Marguerite Helmers, "Fortunino Matania's Goodbye, Old Man", in *Portraits of Remembrance: Painting, Memory, and the First World War* edited by Margaret Hutchison and Steven Trout (Tuscaloosa: The University of Alabama Press, 2020), 204.

²⁰⁴ *Ibid*, 204.

²⁰⁵ Lt. Col. D.S. Tamblin, *The Horse in War and Famous Canadian War Horses* (Kingston: The Jackson Press, 1920), 21.

²⁰⁶ Lorraine Jordens, "Diary of a World War One Veterinary Officer", *Can Vet J* Volume 28 (1987), 276.

The Beersheba Battle on October 31, 1917 was an effort by Australian forces to gain control of water for their horses, which had gone without for 24-60 hours.²⁰⁷ Watering arrangements at the Western Front were often inadequate. Water troughs, when provided, were typically found to be frozen during colder months and most horses including those of the 46th Battery were fortunate if they had one drink of water per day, a far cry from the 5-10 gallons that they need in order to thrive.²⁰⁸ Even on days when troughs were thawed and accessible to the animals, Australian war diaries from the time note that their units often had “difficulty in watering” their animals “owing to congestion at water troughs”.²⁰⁹ Supplying water for all units came to be a time-consuming process which often interfered with training, becoming a major headache and cause for concern for all troops who relied on the animals for proper transportation. While engineers did consistently battle to provide “2.7 million L of drinking water per day to keep animals fit,” this often was not successful and many horses perished due to dehydration and colic induced by a lack of access to clean drinking water.²¹⁰ A further obstacle in the way of supplying sufficient water supply for equines was that the Germans were known to poison water supplies, a so-called “diabolical form of wickedness.” This was a frequently cited concern on the Flanders front specifically where the French found that “wells and streams had been polluted by the enemy.”²¹¹ While the Germans themselves grew suspicious of potential counterattacks on their own water supply and therefore employed filtering and water-testing machines, this hazard was of major concern for the BEF due to the fact that poisoned water had the power not only end the lives of

²⁰⁷ Steven J. Corvi, “Men of Mercy: The Evolution of the Royal Army Veterinary Corps and the Soldier-Horse Bond During the Great War”, *Journal of the Society for Army Historical Research* Vol. 76, No. 308 (1998), 282.

²⁰⁸ Lorraine Jordens, “Diary of a World War One Veterinary Officer”, *Can Vet J* Volume 28 (1987), 276.

²⁰⁹ “AWM4 Australian Imperial Force unit war diaries, 1914-18 War: 6th Australian Mobile Veterinary Section”, *Australian War Memorial* Accession Number RCDIG1003126, Collection AWM4 27/18/3, Item Count 3 (1917). 5

²¹⁰ Tim Cook and Andrew Iarocci, “Animal Soldiers”, *Canada’s History* 93, no. 5 October 2013, p. 20-27.

²¹¹ “An Unnecessary Precaution: Germans Testing the Water in a Serbian Village Well, Fearing Pollution”, in *The Illustrated War News* Part 83 (March 8, 1916), 29.

men but also to decimate numbers of equines who were so heavily relied upon for their service in this war.

The final primary feeding and watering obstacle that contributed to the demise of countless horses at the Western Front particularly in the early years of the war was improper equine dental care. In addition to the sensitive nature of the equine digestive system, horses also have unique teeth. Throughout their lifetimes, a horse's teeth will continue to erupt out of the jaw, a trait that is common in animals that exist on a diet of tough grasses. Since horses also chew their feed in circular motion, uneven wear takes place on the teeth and various sharp points form.²¹² This causes discomfort and sores to develop in the mouth, affecting their ability to eat and even perform their assigned jobs. As a result, they need their teeth floated or filed down typically once a year - if not every six months - in order to ensure that they can eat and drink properly. Without some degree of attention paid to this aspect of equine care, horses will stop eating and drinking, therefore putting them at risk for rapidly losing condition and falling victim to detrimental illnesses such as colic. Unfortunately this was not commonly recognized on the Western Front and many of the animals' teeth were permitted to remain sharp, which made them uncomfortable and eventually necessitated their transport to hospital when they refused to eat for so long that their condition had irreversibly declined. Those who were successfully evacuated for treatment often then had to be returned to the front soft and unfit for their work, causing further concern for those who relied on them. A great deal of debility was found to be caused by poor condition from irregularities of the teeth, an aspect of equine care that was often overlooked especially early in the war.²¹³ Records show that horses often showed "teeth in poor condition,"

²¹² Beth Pieper, "Horses Need to See the Dentist Too", *University of Illinois Urbana-Champaign: College of Veterinary Medicine* (April 21, 2018) <https://vetmed.illinois.edu/pet-health-columns/horse-teeth/>

²¹³ "War Diaries - Assistant Director of Veterinary Services, Canadian Corps", *Library and Archives Canada*, RG9-III-D-3 Volume 5042 File 885, June 1917, 31.

facing severe negative impacts as a result.²¹⁴ Since dentistry care for equines was not deemed a primary concern early on, many horses either starved or struggled to keep up with the tasks asked of them due to their inability to keep weight on, resulting in injury and illness down the road. It was a pity to lose valuable animals through evacuation on account of something preventable such as “long or split teeth” but it sadly happened often, decreasing BEF equine numbers and subsequently compromising the lives of men at the Western Front.²¹⁵

As it was increasingly realized how many equine lives were lost to insufficient feeding and watering, steps were made to correct these issues in an effort to preserve numbers. Later in the war, educational pamphlets and booklets were released to troops charged with equine care by veterinary units to offer them direction in terms of acceptable feeding practices. These tools further offered instruction on how to properly prepare various equine foods to make the most of the materials available and to ensure that proper protocol could be followed. For example, guidance was given on how to make a bran mash. It was instructed that two double handfuls of bran were to be added to a bucket and boiling water poured on it, as much as the bran could reasonably soak up. It was then to be covered with a rug and left to cool. When it was ready to consume, a teaspoon of salt was added to act as an electrolyte and to encourage further drinking.²¹⁶ These pamphlets also offered advice for avoiding digestive concerns such as sand colic. In order to prevent this potentially fatal condition, troops were instructed to feed horses off of blankets or tarps and to offer the animals chloral hydrate balls with linseed oil.²¹⁷ For constipation and diarrhoea, it was instructed that dry bran or soft food and greens be offered to

²¹⁴ “War Diaries - No. 1 Canadian Mobile Veterinary Section”, *Library and Archives Canada* RG9-III-D-3, Volume 5043 File 890, 1918.

²¹⁵ “War Diaries - Assistant Director of Veterinary Services, Canadian Corps”, *Library and Archives Canada* RG9-III-D-3, Volume 5042 File 885, June 1917, 31.

²¹⁶ “Official Field Service Pocket Book of 1914 Veterinary Service (UK)”, *H.M. Stationary Office* (1914): Article 32.

²¹⁷ *Ibid*, Article 25.

the animals to help them recover.²¹⁸ This instructional literature, while seemingly insignificant, went a long way in ensuring that all forces were educated on how the animals should be fed. As the war progressed and issues in care were increasingly corrected, troops did make efforts to supply proper forage as well and emphasis was placed on allowing horses to graze whenever grass was available. Thus, warm weather tended to have a positive impact on the animals and where grass was indeed obtainable the effect was found to be marked.²¹⁹ Further, troops turned to ingenious ways to remedy the insufficient hay supplies brought to the frontlines. British troops, for example, turned to chaff, a 50/50 mixture of hay and straw that could be chopped up by hand, and was therefore easier to prepare and offer to the animals than hay which takes a significant amount of time and labour to harvest and bale.²²⁰ While straw was not ideal, when mixed this way with hay it could be used as bulk to make the available supply of hay go further. Further substitutions could be made and were suggested. For oats, maize, small quantities of barley, linseed cake, linseed, peas, and beans could be used. For laxative purposes, bran, turnips, beetroot, carrots, green crops, brewers and distillers grains could be offered.²²¹

Schemes were also designed to help minimize loss of important food supplies that troops did have access to. To prevent hay from being blown away before it could be consumed and to further protect the horses from harsh elements common at the Western Front, wind screens were made from burlap and were erected around picket lines and paddocks.²²² This was an ingenious solution to the issue at hand and allowed troops to ensure that hay went further and that even the

²¹⁸ Ibid, Articles 26 & 27.

²¹⁹ "War Diaries - Deputy Assistant Director of Veterinary Services, 1st Canadian Division", *Library and Archives Canada* RG9-III-D-3, Volume 5042 File 884 (March 1915), p. 10.

²²⁰ "Care and Feeding", *Brooke USA: Horse Heroes via The United States World War One Centennial Commission* (Accessed January 2022) <https://www.worldwar1centennial.org/index.php/care-and-feeding.html>.

²²¹ Ibid.

²²² Lt. Col. D.S. Tambllyn, *The Horse in War and Famous Canadian War Horses* (Kingston: The Jackson Press, 1920), 21.

lowest condition of horses could be kept somewhat protected from wind and rain. Further, boilers were designed and brought to the frontlines in order to heat food for the animals when necessary, particularly during the winter.²²³ Hay nets, which were used early in the war but generated other concerns, were advanced in an effort to prevent continued loss of hay to mud and prevent the animals from getting hooves stuck in them, leading to other injuries. Overhead hay net lines were brought into use, allowing troops to suspend hay higher up, thereby preventing injuries, allowing more hay to be saved, and offering the animals more of it to actually eat.²²⁴ These schemes helped to reduce deaths from starvation and exposure due to decreased condition, ensuring that BEF troops were not without these essential animals for too long. While some animals did still need to be sent behind the lines to animal hospitals, their treatment here also came to be improved as the war drew on. Horses were frequently turned loose at these institutions and were fed four times daily which allowed them to gain their strength back as quickly as possible to ensure they could return to their duties much more rapidly than before.²²⁵ The shifts made in how equines were fed at the Western Front went a long way in ensuring better condition overall and many equines later in the war were found to be fed well, receiving attentive veterinary care near the front when required and more advanced care and recuperation in hospitals in the rear for more serious cases.²²⁶

Steps were also taken to address the concerns over appropriate watering for all BEF equines fighting in the First World War. Realizing the importance of access to fresh drinking water for the horses, efforts were made to ensure that dehydration was kept at bay and casualties

²²³ Ibid, 21.

²²⁴ Ibid, 22.

²²⁵ Steven J. Corvi, "Men of Mercy: The Evolution of the Royal Army Veterinary Corps and the Soldier-Horse Bond During the Great War", *Journal of the Society for Army Historical Research* Vol. 76, No. 308 (1998), 281.

²²⁶ Charles A. Carmello, "'They Had No Choice:': Images of Equines in the Great War", *Anglistik International Journal of English Studies* 29.1 (2018), 76.

from the condition were confined to a minimum. It was even found that, despite almost insurmountable challenges, units were successful in providing sufficient access to water for most of the animals, going to the appropriate measures to ensure this. Engineer Corps worked diligently to ensure that all steps were taken to gain access to proper supply and carried their work out efficiently.²²⁷ Troughs were provided to which water could be conveyed through pipes to allow more units to water their horses at any given time. At most troughs, schedules were provided to prevent congestion around these important posts and to permit all units to water their horses. Efforts were further made to ensure that horses were led to troughs “at least three times a day, and in summer four times.”²²⁸ While this may not seem particularly exceptional given the fact that ideally these animals would be granted free access to clean water to consume as needed, given the challenges at hand this was a great achievement. With most of the water supply being sourced from streams, emphasis was also placed on filtering for silt when pumping into troughs to avoid sediment buildup in equine stomachs which could eventually have adverse effects. Officers were also assigned to be present at watering stations to ensure that practices were adhered to in an effort to ensure that all animals were successfully watered and that none got trampled or kicked when drinking. “Proper water discipline at troughs” was even noted by officers as being one of the most important things to remember in stable management and was consistently impressed on those concerned.²²⁹

Even during exceptionally trying times such as in the aftermath of the Battle of Vimy Ridge, soldiers worked tirelessly to bring their horses to the high peak of the ridge where water

²²⁷ Lt. Col. D.S. Tamblyn, *The Horse in War and Famous Canadian War Horses* (Kingston: The Jackson Press, 1920), 22.

²²⁸ “Care and Feeding”, *Brooke USA: Horse Heroes via The United States World War One Centennial Commission* (Accessed January 2022) <https://www.worldwar1centennial.org/index.php/care-and-feeding.html>.

²²⁹ *Ibid.*

was found to be obtainable.²³⁰ It was impressed upon the men charged with equine care how important water was for the animals and soldiers frequently were noted for offering their animals water first after a hard day's work. Horses were watered by Mobile Veterinary Sections, units that provided "first aid treatment for sick and wounded animals" at the frontlines as opposed to veterinary hospital staff who tended to the animals behind the frontlines, after any movement and records point to some units that even offered their own precious water supplies to animals in need.²³¹ This is evident in an example seen on the road back from Mazar recalled by Brigadier General W.J. Urquhart who was then GSO3 of the Anzac Mounted Division. While this example occurred on the Eastern Front, such efforts were commonly seen on the Western Front as well. The general and his staff were riding along when they came upon a solitary trooper "whose horse was down, exhausted." In an effort to save his comrade, the soldier had poured his remaining

Figure 12: "(Belgian) A Belgian girl gives Canadian Artillery horse a drink. November, 1918."



water into a canvas bucket "and was trying to help his horse drink."²³² Seeing the sorrowful sight, Chauvel, the general, dismounted and emptied his own water bottle into the "bucket as he expressed his concern." After he looked at his

²³⁰ Lt. Col. D.S. Tamblyn, *The Horse in War and Famous Canadian War Horses* (Kingston: The Jackson Press, 1920), 22.

²³¹ "Guide to Sources Relating to Units of the Canadian Expeditionary Force: Canadian Army Veterinary Corps", *Library and Archives Canada*, 1.

²³² Steven J. Corvi, "Men of Mercy: The Evolution of the Royal Army Veterinary Corps and the Soldier-Horse Bond During the Great War", *Journal of the Society for Army Historical Research* Vol. 76, No. 308 (1998), 283.

companions, they all “took the hint and added their small supply to the” bucket as well.²³³ Thus, despite the daunting task of supplying so many horses with necessary water, groups like that accompanying Chauvel were recognized for their efforts to meet these requirements to the best of their capabilities and for having spared no effort in procuring the necessary supplies for the animals.

To reduce the number of equines that had to be sent to hospitals at the Western Front, efforts were also made towards correcting misconceptions concerning equine dental health. Continued education for veterinarians charged with equine care allowed them to better understand the importance of proper dental maintenance and permitted them to impress upon all those involved in equine management to be more cognizant of this issue. This included ensuring that troops were well-versed in understanding the signs of tooth discomfort in horses and were performing frequent checks to make sure equine teeth were not becoming too sharp. The importance of the practice of regular floating was more strongly emphasized to all units on the realization that it was a shame to lose animals on account of the conditions of their teeth.²³⁴ Further, since so many animals were affected, dental clinics were set in place to correct this previously neglected area of care. This ensured that all animal teeth were appropriately cared for. Finally, emphasis was placed on securing and developing more efficient dental tools that could help veterinarians to properly maintain equine dental health. Most units were successfully able to secure a proper supply of larger dental instruments including speculum, dental forceps, molar cutters, extension trephine and chisels.²³⁵ This allowed them to carry out their duties more easily

²³³ Ibid, 283.

²³⁴ “War Diaries - No. 1 Canadian Mobile Veterinary Section”, *Library and Archives Canada* RG9-III-D-3, Volume 5043 File 890, 1918.

²³⁵ “War Diaries - Assistant Director of Veterinary Services, Canadian Corps”, *Library and Archives Canada* RG9-III-D-3, Volume 5042 File 885, June 1917, 31.

and minimized how many animals had to be removed to hospitals behind the frontlines to have their teeth cared for. While the process of floating teeth now is much different and the techniques used then were still relatively primitive and somewhat ineffective, these innovations taken towards maintaining better dental care for horses had lasting impacts and ensured that fewer war equines perished from tooth pain which contributed to difficulties eating and drinking, therefore contributing to loss of condition.

While advancements made in sufficiently feeding and watering equine troops at the Western Front during the First World War were certainly impressive for their time and helped to reduce equine starvation and dehydration, it must be considered how far these advancements truly went and what was the real reasoning behind placing such emphasis on this aspect of care. While it would be comforting to state that these efforts were made to mend the horrific situation seen early in the war because soldiers increasingly saw how much these living beings were suffering and were touched by their burden, this would be a false appraisal of this story. At the core of the decision to prioritize changes in feeding and watering for equines was the realization that these animals were essential to the war effort as tools for transportation. “Sickness, wounds, insufficient feed, exposure to elements, excessive work without rest, poor grooming” or choking could put a “horse or mule out of action” for long periods of time, if not indefinitely, which compromised the mobility of units in the field.²³⁶ Troops of the BEF heavily relied on horses, donkeys, and mules to transport not only troops but also significant supplies, including food and water for the soldiers themselves. Without having this vital cog in transportation lines, the soldiers would begin to perish from dehydration and starvation. With early “negligence and ignorance of the most simple rudiments of horse-care” costing countries millions of dollars in the

²³⁶ Andrew McEwan, ““Maintaining the Mobility of the Corps:” Horses, Mules, and the Canadian Army Veterinary Corps in the Great War”, Doctoral Thesis, University of Calgary (2016), 2.

first two years of hostilities, changes were not just recommended but were absolutely necessary to limit unnecessary loss and continue pushing towards victory.²³⁷ For each operation of BEF troops, the tactical success or failure “relied on securing water for the horses,” so the changes made to ensure this was possible was not necessarily because the horses deserved the utmost in care and attention, but to ensure that success was ultimately achieved.²³⁸ While the number of horses an army had was certainly important, how fit these horses were to do their jobs was even more so. Emphasis had to be placed on ensuring that they were in as good condition as the situation allowed, even if it meant that troops had to get creative with their solutions.

Beyond this, the advanced nature of these movements needs to be considered. On paper, such changes in how animals were fed and watered at the Western Front seem impressive but there was a darker reality lurking in the shadows. A continued lack of education and knowledge in this aspect of horse care certainly endured as the war continued, allowing troops to cut corners wherever possible while still doing the bare minimum to keep the animals alive. It came to be estimated that nearly 281,000 war horses in the BEF were “dying of neglect” and that most were still picketed in the open, not receiving proper care at the hands of some negligent veterinary officers like Captain C.G. Saunders.²³⁹ Veterinarians and farriers alike expressed continued concern over the lack of sufficient care. Thomas Goodwin, for example, who was a farrier serving with the Australian Field Artillery on the Western Front, expressed his concern in his diary. He found that the French in particular were extremely negligent when it came to feeding and caring for their artillery horses, doing great cruelty to the animals. Horses were often found

²³⁷ “War Diaries - Assistant Director of Veterinary Services, Canadian Corps”, *Library and Archives Canada* RG9-III-D-3, Volume 5042 File 885, January 1917, 20.

²³⁸ Steven J. Corvi, “Men of Mercy: The Evolution of the Royal Army Veterinary Corps and the Soldier-Horse Bond During the Great War”, *Journal of the Society for Army Historical Research* Vol. 76, No. 308 (1998), 282.

²³⁹ Lorraine Jordens, “Diary of a World War One Veterinary Officer”, *Can Vet J* Volume 28 (1987), 277.

to be suffering from the affects of colic and it was seen that the men watered the animals only “twice per day, not because” they could not get water but because their system was so rotten.²⁴⁰ Even when the animals were granted access to water, they were often so ill and injured that they could hardly relieve themselves with such a treat. Goodwin recalled seeing “horses taken to water with hardly a leg to stand on” with untreated bullet wounds putting them very close to death.²⁴¹ He also wrote of the “favourite habit” some units had of “jagging the mouth of the horse,” or pulling at their mouths with the metal bit used to steer, leaving them bleeding and making it difficult for them to drink out of fear of the pain it may cause.²⁴² Another individual, John Bruce, who also served in the Field Artillery, admitted himself that he along with many of



Figure 13: “Watering Canadian Artillery horses at the front. November, 1916.”

the men assigned to equine care frequently shirked their duties out of laziness and a lack of empathy for the animals. He wrote in his diary that he dodged “work all the morning as there was nothing to do.”²⁴³ He mentioned that he was “supposed to groom + feed” the horses but that he “ducked off” instead.²⁴⁴ Men like him found that they did not like having to work with and care for the animals, and so many horses went without sufficient food and water under their watch. This

²⁴⁰ “Thomas Goodwin War Diary, 25 April 1915-22 July 1916”, *State Library New South Wales*, p.52.

²⁴¹ *Ibid.*

²⁴² *Ibid.*

²⁴³ Nathan Wise, ““A good faithful pal”: working relationships between humans and horses during the First World War”, *First World War Studies* Vol. 12, No. 1 (2021), p. 59.

²⁴⁴ *Ibid.*, 59.

demonstrates a continued ignorance that calls into question how much actually changed throughout the war in this aspect of equine care and how little soldiers continued to think of equines as sentient beings.

Such bad practice can also be seen in other aspects of equine care. Emphasis was placed throughout the war on providing grain rather than the much more nutritionally balanced and significant hay due to a continued lack of understanding of how equines should ideally be fed. War horses were in hard work so certainly needed a grain supplement for energy but directives dictated that hay should be used as a “second best” feed, which is entirely opposite from the truth.²⁴⁵ Even when hay was offered, despite an overarching understanding that hay could easily be trampled and wasted, laziness and poor supervision allowed soldiers to continue to throw hay and grain into muddy corrals, making the animals fight amongst the mud just to eat and subsequently causing a spike in colic cases.²⁴⁶ This meant that the animals were miserable and suffered immensely. In American units, continued concerns were also seen. American Quartermaster depots and artillery units were “staffed by troops that did not have the same training in handling or caring for horses and mules” and their regulations were less than half a page of general direction.²⁴⁷ As a result, gruesome conditions continued to be reported which showed that “there was simply not a big concern about the health of animals.”²⁴⁸ To make matters worse, soldiers continued to turn “disease-harried horses from a muddy corral to a common trough” which meant that the water in the trough came to be “saturated with nasty nasal

²⁴⁵ “Care and Feeding”, *Brooke USA: Horse Heroes via The United States World War One Centennial Commission* (Accessed January 2022) <https://www.worldwar1centennial.org/index.php/care-and-feeding.html>.

²⁴⁶ *Ibid.*

²⁴⁷ *Ibid.*

²⁴⁸ “The Veterinary Corps: Caring and Curing”, *Brooke USA: Horse Heroes via The United States World War One Centennial Commission* (Accessed February 2022) <https://www.worldwar1centennial.org/index.php/brookeusa-veterinary-corps.html>.

discharges floating thick as moss on a stagnant pool.”²⁴⁹ Among the illnesses spread at these troughs were strangles, pneumonia, mange, and glanders. An inability to understand the potential effects of allowing healthy and ill horses to share water and laziness surrounding the task of cleaning troughs between uses meant that many horses continued to suffer even later in the war. “The agony and morbidity among these miserable...animals” was found to run from 75 to 80 per cent and, despite an understanding that it was to the detriment of units to allow these animals to perish due to lack of sufficient food and water, “no remedial measures” were put in force and “none were contemplated.”²⁵⁰ This information demonstrates that troops were not concerned over sufficient feeding and watering to minimize suffering of the animals but only with keeping them well enough to continue to work. As late as February 1918, animals were found to be in conditions so bad that they were deemed to be living in torture chambers by some veterinarians concerned about the welfare of the animals.²⁵¹ As well, even nearly three years after many of the animals arrived at the front, little was done to correct errors with teeth due to a continued inability to fully appreciate the negative impacts of such negligence on the animals.²⁵² Thus, it must be recognized that any advancements made were matched by continued ignorance. Similar to thoughts regarding maintenance of a vehicle, a general consensus existed amongst British and American Expeditionary Forces that the bare minimum of maintenance needed to be done to keep these animals running just enough to continue to strive for victory.

²⁴⁹ Louis A. Merillat and Delwin M. Campbell, *Veterinary Military History of the United States Volume II* (Haver-Glover laboratories, 1935) p. 687.

²⁵⁰ *Ibid*, p. 687.

²⁵¹ “The Veterinary Corps: Caring and Curing”, *Brooke USA: Horse Heroes via The United States World War One Centennial Commission* (Accessed February 2022) <https://www.worldwar1centennial.org/index.php/brookeusa-veterinary-corps.html>.

²⁵² “War Diaries - Assistant Director of Veterinary Services, Canadian Corps”, *Library and Archives Canada* RG9-III-D-3, Volume 5042 File 885, June 1917, 31.

Chapter 4: Humanity in an Inhumane War

“Imagine the terror of the horse that once calmly delivered goods in quiet suburban streets as, standing hitched to a gun-carriage amid the wreck and ruin at the back of the firing line, he hears above and all around him the crash of bursting shells. He starts, sets his ears back, and trembles; in his wondering eyes is the light of fear. He knows nothing of duty, patriotism, glory, heroism, honour - but he does know that he is in danger.”

Colonel the Right Hon. Mark Lockwood, C.V.O., M.P.
The War Illustrated 27th November 1915

Between 1914 and 1918, a large number of soldiers fighting at the Western Front experienced varying degrees of shell shock and other related post-traumatic stress disorders. War was a wicked game and the horrors experienced by millions on a daily basis occasionally was too much to cope with. Sitting in muddy trenches, watching friends and sometimes family members perish, and witnessing and engaging in death nearly everyday was enough to make even the most strong-willed of men lose their minds. Much has been written regarding this aspect of Great War history but what of the six to eight million equines who also served and gave their lives in this conflict? These animals experienced terrible conditions and witnessed sights that can never be fully understood by those who did not experience them firsthand. While it is important to analyze how war affected humans, consideration also has to be given to how the conditions of war affected horses, donkeys, and mules mentally and physically. As well, attention needs to be paid to what efforts were made both at home and overseas during this period to alleviate discomfort for these animals, even if these changes made were not entirely to the benefit of the animals themselves. This chapter will explore this aspect of the equine experience during the First World War to consider what conditions were like, what shifts in practice were made, and the reasoning behind such changes.

Much like humans, animals on the Western Front throughout the First World War found it difficult to survive in an incredibly hostile and unfamiliar environment. Most, removed from a

“comfortable existence and steady routine at home and brought great distances overseas to a landscape riddled by shell holes, mud, disease and uncertainty,” were severely impacted mentally and found it difficult to cope with their situations.²⁵³ Since the horse is a naturally “timid and nervous animal” and tends to favour the flight side on the fight-or-flight spectrum, it is no wonder that so many struggled to accept their fate and work tirelessly amidst constant shellfire and dismal weather conditions.²⁵⁴ For many men involved, engagement directly in the war was an unfortunate likelihood and many volunteered to go overseas in order to fight. For horses, the story was different. As Lieutenant Tom Butt of the King’s Own Yorkshire Light Infantry reflected, horses “were not free men” like their human comrades and had no obvious agency in terms of what they did and how they did it.²⁵⁵ These animals could not be reasoned with or explained to and so were forced from their homes, to work tirelessly in difficult terrain with no understanding of the forces at hand. Given the fact that animals could not talk, it was commonly held that none “should have been allowed there” but this had to be disregarded due to the significance of these animals to the overall war effort.²⁵⁶ General Sir Arthur Currie himself expressed how war could affect these animals and how unique their psychological experiences were at the Western Front. While men had the ability to voice their concerns over their experiences, horses “could neither speak for [themselves] nor help [themselves].” Instead, they were forced to stand, “patient and ready” to do their assigned work “in the misery of rain and

²⁵³ Marguerite Helmers, “Fortunino Matania’s Goodbye, Old Man”, in *Portraits of Remembrance: Painting, Memory, and the First World War* edited by Margaret Hutchison and Steven Trout (Tuscaloosa: The University of Alabama Press, 2020), 212.

²⁵⁴ Steven J. Corvi, “Men of Mercy: The Evolution of the Royal Army Veterinary Corps and the Soldier-Horse Bond During the Great War”, *Journal of the Society for Army Historical Research* 76 (1998), 272.

²⁵⁵ Marguerite Helmers, “Fortunino Matania’s Goodbye, Old Man”, in *Portraits of Remembrance: Painting, Memory, and the First World War* edited by Margaret Hutchison and Steven Trout (Tuscaloosa: The University of Alabama Press, 2020), 206.

²⁵⁶ Capt. M.D. Eder., “Psycho-Pathology of the War Neuroses”, *The Lancet*, 12 August 1916, p. 266.

slime, under the sudden pain of wounds” and relied on man for everything.²⁵⁷ It was difficult to understand how war impacted horses; no one “could possibly describe what war” even meant to the horse, especially in circumstances as seen in the First World War. Facing “long winters of cold and mud, the torment of flies in summer, and the terror and fright of the battle followed by the agony of the bullet and shrapnel wounds,” horses had to endure a lot and struggled both mentally and physically as a result.²⁵⁸

While it was generally assumed, primarily by officers due to their own naivety and inexperience handling these animals, that horses had “a much less acute sense of feeling than men” and that they did not suffer mentally, evidence of the opposite was soon evident.²⁵⁹ In fact, in many cases the animals seemed to feel and react more to their environments than their human counterparts and they were not alone. Countless animals were used throughout the First World War for their senses and their ability to aid in the war effort. For example, dogs were employed for their keen senses of smell and their excellent hearing to serve as guards and to track down wounded soldiers on battlefields and in trenches.²⁶⁰ Even slugs were used for their senses. Slugs visibly indicate discomfort “by closing their breathing pores and compressing their bodies” when they come in contact with toxic liquid or gas. In so doing, these creatures were able to warn soldiers of impending gas attacks. As soon as they were seen to exhibit such discomfort, the men fighting in the trenches would put their gas masks on to protect themselves.²⁶¹ While a variety of animals were used in similar capacities for their abilities to feel and sense things before humans

²⁵⁷ Sir Arthur Currie, “Foreword” in Lt. Col. D.S. Tamblyn’s *“The Horse in War” and Famous Canadian War Horses*, (Kingston: Jackson Press, 1920), I.

²⁵⁸ Stephen Wynn & Tanya Wynn, *Animals in the Great War* (Pen & Sword Books Limited, 2019), p. 106.

²⁵⁹ Tim Cook and Andrew Iarocci, “Animal Soldiers”, *Canada’s History* 93, no. 5 October 2013 (Accessed March 2022), p. 20-27.

²⁶⁰ Leah Tams, “How did animals (even slugs) serve in World War 1?”, *National Museum of American History: Behring Center* (November 14, 2014), <https://americanhistory.si.edu/blog/how-did-animals-even-slugs-serve-world-war-i>.

²⁶¹ *Ibid.*

could, equines were amongst the most vital. It was recalled by soldiers working closely with the animals that horses, donkeys, and mules would often go berserk in the presence of machine fire, exhibiting behaviours such as stampeding and bolting from the nightmare before their eyes.²⁶²

Drivers of transport and ammunition wagons recalled that their work with horses was incredibly difficult because they frequently found themselves the main target of enemy shellfire because horse transport “rapidly became the only means of carrying vital rations, ammunition and supplies to the forward troops.” As a result, these moving units often experienced what was once termed “silent death,” as they struggled through mud amidst shells dropping all around them.²⁶³

Horses were just as likely as soldiers, if not more so, to be struck by shells and they struggled to cope as a result.²⁶⁴ Despite early insistence that equines were just machines, these animals rapidly proved their intelligence and their ability to feel as deeply as men. Major R.S. Timmis of the Royal Canadian Dragoons reported that his mule learned to “lie down when under fire” and would find a “hollow piece of ground” to do so in, only returning to her standing position when the firing ceased.²⁶⁵

Horses were further recognized for their abilities to sense impending doom and their capacity for feeling fear well before it was even upon them. On ships crossing overseas carrying horses, the animals were reported to neigh and present “restless demeanour in the stalls” prior to torpedo attacks.²⁶⁶ Another example of equines demonstrating such acute senses comes from H. Thoburn-Clarke, who wrote an article in a wartime newspaper on a “pretty, cream-coloured Uist

²⁶² Stacy Hackner, “Stress in Non-Human Animals,” *UCL*, October 2015 <https://blogs.ucl.ac.uk/researchers-in-museums/2015/10/14/stress-in-non-human-animals/>.

²⁶³ Jane Flynn, “Sense and sentimentality: a critical study of the influence of myth in portrayals of the soldier and horse during World War One”, *Conference on Critical Perspectives on Animals in Society* (University of Exeter, UK, 2012), p. 27.

²⁶⁴ Stephen Wynn & Tanya Wynn, *Animals in the Great War* (Pen & Sword Books Limited, 2019), p. 108.

²⁶⁵ Lt. Col. D.S. Tamblyn’s “‘The Horse in War’ and Famous Canadian War Horses”, (Kingston: Jackson Press, 1920), 63.

²⁶⁶ *Ibid*, 12.

pony named Polly” who belonged to the Transport Section of a Mountain Battery and who was in service for quite a few campaigns. She was noted for having an acute sense of hearing, being able to “detect the whine of a shell long before anyone else.”²⁶⁷ It was found that when she sensed an incoming shell, she would “lie down, stretch out her forelegs, and, shutting her eyes, be “as dead as a hedgehog” in a moment.” If her driver failed to catch her cues, she was recognized for her ability to gaze at him and “whinny earnestly” until he followed suit and took up position by her side.²⁶⁸ As a result of their ability to understand a situation before an event unfolded, soldiers began to rely on their animals to keep them safe. Private James Robert Johnston, a horse driver in the transport section of the 14th Machine Gun Company, recalled that his horse was more aware of their surroundings than he was and claimed that this was the reason he lived so long.²⁶⁹ Despite early ignorance, equines therefore progressively proved that they had the “capacity to experience and express emotions” throughout the war, feeling sentiments of “fear, rage, confusion, gain, loss, happiness” and sadness.²⁷⁰

Alongside the gruesome conditions of war that equines faced and reacted to, an inability to understand how war impacted these animals early in the war put them in the hands of men who would often abuse and neglect them, in part because they themselves were “overworked, exhausted, and afraid.”²⁷¹ Men were often found to have added stowage on top of wagons which made “sense to sleep-deprived soldiers but exasperated the staff officers who watched in horror

²⁶⁷ H. Thoburn-Clarke, “Soldiers’ Pets: Stories from the Trench Menagerie” in *The War Budget Illustrated* published by *The Daily Chronicle* Vol. VIII, No. 11 (July 27th, 1916): 339.

²⁶⁸ *Ibid.*

²⁶⁹ Tim Cook and Andrew Iarocci, “Animal Soldiers”, *Canada’s History* 93, no. 5 October 2013 (Accessed March 2022), p. 20-27.

²⁷⁰ Stacy Hackner, “Stress in Non-Human Animals,” *UCL*, October 2015 <https://blogs.ucl.ac.uk/researchers-in-museums/2015/10/14/stress-in-non-human-animals/>.

²⁷¹ Tim Cook and Andrew Iarocci, “Animal Soldiers”, *Canada’s History* 93, no. 5 October 2013 (Accessed March 2022), p. 20-27.

as draught animals struggled to pull extra.”²⁷² One officer even recalled watching soldiers hitching “three or four overloaded Lewis machine gun carts in a makeshift train...pulled by a single, battered draught animal.”²⁷³ Beyond that, men often failed to understand the effects that heavy ridden work had on the animals. They were frequently found to be riding their horses hard, being entirely unaware of how it impacted them, often galloping or moving at higher speeds on hard ground when a walk would suffice.²⁷⁴ Further negligence was seen in how animals were treated when they were severely injured at the Western Front. Early in the war, patrols had to be sent out to rescue animals who had been left to die on the roadside. While it was remarked by some soldiers how cruel such thoughtless abandonment truly was, this was a common occurrence and it was not unusual to march by horses on their last legs suffering all alone as they blew their last breaths out of their flared nostrils.²⁷⁵ As George Orwell later observed, a fondness for horses was something that had become faintly improper which was felt throughout this period. Horses belonged to the “vanished agricultural past, and all sentiment for the past carries with it a vague smell of heresy.”²⁷⁶ As war became more mechanized, it was increasingly seen that sentimentality towards horses was not important and that the animals were more a tool to be used as needed, just as a motorized vehicle would be. Thus, these animals were subject to not only the miserable conditions at the Front but also to intense and unforgivable abuse at the hands of those who were meant to care for them.

²⁷² Ibid.

²⁷³ Ibid.

²⁷⁴ Andrew McEwan, “Maintaining the Mobility of the Corps:” Horses, Mules, and the Canadian Army Veterinary Corps in the Great War”, Doctoral Thesis, University of Calgary (2016), 104.

²⁷⁵ Marguerite Helmers, “Fortunino Matania’s Goodbye, Old Man”, in *Portraits of Remembrance: Painting, Memory, and the First World War* edited by Margaret Hutchison and Steven Trout (Tuscaloosa: The University of Alabama Press, 2020), 203.

²⁷⁶ George Orwell, *The Road to Wigan Pier*, (Harmondsworth: Penguin, 1937), 176-177.

It should be noted that the treatment of these animals seen early in the First World War was not new and in fact was common practice particularly in urban centres in the years leading up to 1914. While the vast majority of equines in rural areas on farms with large and open pasture lived relatively comfortably, being used only when they were needed and being fed “the most stimulating foods,” kept in warm stables at night, and sufficiently groomed as evidenced by the amount of literature put out to farmers regarding best practices for exceptional care, their comrades living in urban areas were not so fortunate.²⁷⁷ In big cities like London, England, sick and injured horses working on the streets often did not have owners who properly cared for them. Horses were used by many, to either pull heavily laden wagons or as taxi cabs to move citizens from one place to another, but they were often only seen as a means of earning a living and were not appreciated nor respected for their efforts. When they came to be ill or were injured, they were “more likely to be destroyed” or abandoned than offered sufficient veterinary care and attention, given the fact that they were so easily replaced and therefore were not worth the time and money that would have to be spent in order to properly rehabilitate them.²⁷⁸ Perhaps as a result of this insufficient understanding of proper equine care in urban centres and due to the fact that a mass exodus to cities was commonly seen at this time, the British War Office and its counterparts in other countries were ill-prepared to care for their military equines upon the commencement of war. They did not properly fund animal care resources nor did they place any real emphasis on educating those charged with their maintenance. As a result, they had to rely on organizations like the Royal Society for the Prevention of Cruelty to Animals (RSPCA) and the Blue Cross when it came to the welfare and treatment of the horses that served in the British

²⁷⁷ “The Horse: Grooming Horses”, *Massachusetts Ploughman and New England Journal of Agriculture* (1842-1906) April 2, 1898, 8.

²⁷⁸ Stephen Wynn & Tanya Wynn, *Animals in the Great War* (Pen & Sword Books Limited, 2019), p. 100.

Army specifically. Even then, the War Office frequently rejected help and funds from these organizations early in the war because it had created a Veterinary Corps which it regarded, despite being entirely underfunded and understaffed, as perfectly sufficient to care for suffering animals.²⁷⁹ Due to poor understanding of proper practice in the high command early in the war, countless animals were found to be suffering physically and subsequently mentally due to conditions they faced and the men they worked with. Even the Red Cross cared little for animals, offering no guaranteed protection for those who visited the battlefields to relieve or put an end to the sufferings of wounded horses and other animals employed in action.²⁸⁰

As the war progressed and countless equine lives were lost due to negligence and appalling conditions, the impetus for change emerged both overseas with officers and veterinary staff as well as back home with mourning and concerned families. Despite early unawareness of the effects that war could have on the minds and bodies of these animals, those charged with their care rapidly recognized the value in protecting and properly maintaining these animals, if only from a practical standpoint as they were “of great use on the western lines.”²⁸¹ As soldiers saw in the eyes of their four-legged companions glimmers of similar emotions to what they were feeling, greater emphasis was placed on encouraging the idea that while horses were weapons of war, they were not machines. Men and their horses “reciprocally relied on each other” for survival in combat so, officers, seeing the benefit that sufficient care and understanding of these animals had both on the horses themselves and the men under their charge, began to emphasize a closer soldier-horse relationship that helped to secure the safety and sanity of both parties.²⁸²

²⁷⁹ Ibid, 101.

²⁸⁰ Ernest Bell and H. Bailie-Weaver, *Horses in Warfare* (London, War Office, by Animal Friend Society, 1913), p. 11.

²⁸¹ “Humble Helpers in the Great War of Liberation”, in *The War Illustrated* (December 30th, 1916): 477.

²⁸² Steven J. Corvi, “Men of Mercy: The Evolution of the Royal Army Veterinary Corps and the Soldier-Horse Bond During the Great War”, *Journal of the Society for Army Historical Research* 76 (1998), 283.

Horses came to be emphasized as morale boosters for troops. “Being devoid of human love and affection,” men fighting overseas could turn to their horses to talk to and feed, which helped reduce their own suffering.²⁸³ In 1916, Captain M.D. Eder, a British physician and psychoanalyst who served in the Royal Army Medical Corps throughout the war, published an article in *The Lancet*, an independent, international medical journal, on the “Psycho-Pathology of the War Neuroses”. Of particular interest to him was what he termed Case 45 which involved a thick-set and sturdy fellow who was raised around horses. He had within him a natural empathy towards the animals and was always given the most difficult ones to manage. Due to what he witnessed throughout the early years of the war, he suffered from insomnia, terrifying dreams, and shaking hands which frequently put him out of commission for extended periods of time. Eder found that his symptoms were temporarily relieved whilst he was actively engaged in looking after his horses and that his symptoms became much more acute when he was hospitalized and unable to spend time with the animals. While Captain Eder could not understand the soldier’s sympathy for the plight of an animal, it was clear how important this connection was to this young man.²⁸⁴ Since officers and generals needed both their men and their horses to be in top shape to move ever closer towards victory and given the evidence seen regarding how a connection between the two could keep both parties motivated, the soldier-horse relationship was encouraged.

Through training and discipline, senior officers were able to ensure that the soldier-horse relationship could grow out of a sympathetic consideration for the horse’s well-being.²⁸⁵ They encouraged proper time devoted to the daily grind of feeding, grooming, and harness cleaning

²⁸³ Stephen Wynn & Tanya Wynn, *Animals in the Great War* (Pen & Sword Books Limited, 2019), p. 38.

²⁸⁴ Capt. M.D. Eder., “Psycho-Pathology of the War Neuroses”, *The Lancet*, 12 August 1916, p. 266.

²⁸⁵ Jane Flynn, *Soldiers and Their Horses: Sense, Sentimentality and the Soldier-Horse Relationship in the Great War*, New York: Routledge: Taylor & Francis Group, 2020), p. 4.

that ensured this relationship remained strong. They impressed upon their men that such care could create a foundation of trust between man and horse, something that was ignored during the South African War and early in the Great War, with dire results.²⁸⁶ As well, as officers began to better understand how horses could react to their environments, they encouraged their men to monitor such reactions in their animals in order to ensure that these courageous mounts could continue on their work and at the same time warn the soldiers around them of danger. Officers encouraged the use of anthropomorphic terms as a means to understand an animal's motivation and behaviour that made intuitive sense. For example, horses of good character were referred to as 'honest' and as 'gentlemen' while those exhibiting evidence of bad behaviour were labelled as 'rude'.²⁸⁷ This gave soldiers a language that helped them describe what their horses did and was a tool that enabled them to treat their horses with sympathetic consideration that benefited both the animal and the man.²⁸⁸ Given that a horse could keep a man alive or kill him just as easily as a well or badly maintained rifle could, this system of mutual reliance and understanding encouraged trust between both parties that allowed them to better grapple with their circumstances.²⁸⁹ Through this focus on the strong reciprocal bond between soldier and horse in all branches of the British Army, positive effects became evident.²⁹⁰ Emphasis even came to be placed on keeping animals like horses as mascots to boost morale and keep soldiers motivated to

²⁸⁶ Steven J. Corvi, "Men of Mercy: The Evolution of the Royal Army Veterinary Corps and the Soldier-Horse Bond During the Great War", *Journal of the Society for Army Historical Research* 76 (1998), 276.

²⁸⁷ Jane Flynn, *Soldiers and Their Horses: Sense, Sentimentality and the Soldier-Horse Relationship in the Great War*, New York: Routledge: Taylor & Francis Group, 2020), p. 5.

²⁸⁸ *Ibid*, p. 5.

²⁸⁹ Jane Flynn, "Sense and sentimentality: a critical study of the influence of myth in portrayals of the soldier and horse during World War One", *Conference on Critical Perspectives on Animals in Society* (University of Exeter, UK, 2012), p. 27.

²⁹⁰ Steven J. Corvi, "Men of Mercy: The Evolution of the Royal Army Veterinary Corps and the Soldier-Horse Bond During the Great War", *Journal of the Society for Army Historical Research* 76 (1998), 273.

fight, as was the case with one colt who was born on the front lines in August of 1916.²⁹¹ To



Figure 15: "Circus trick by Canadian at Remount Depot."



Figure 14: "A colt which was born in the firing line and has been adopted as a mascot."

further this morale-boosting mission, horses were also frequently ridden in entertaining ways, used in circus acts that were performed behind the frontlines for the soldiers to ease the monotony and horrors they so often faced. With

"an element of sport," performances like these were found to be "so enjoyable" that they increased "the feeling of camaraderie among the troops," ensuring a stronger fighting force for future battles.²⁹²

Photographs from the time portray equines as familiar figures that shared fellowship with humans in garrison and field, and many soldiers sent pictures of themselves and their animals (or strictly of the animals) back home to their families, referring them as the best friends they could ask for.²⁹³ Britons of all ranks, matched by troops from other nations encompassed in the BEF, came to be recognized for their love of horses, something that bystanders could easily recognize

²⁹¹ "A Foregathering of Staff Officers in Belgium", in *The War Budget Illustrated* published by *The Daily Chronicle* Vol. VIII, No. 12 (August 3, 1916): 364.

²⁹² "The Soldiers' Own Circus at Salonika: A Trained Horse in the Ring Made by the Men", in *The Illustrated War News* Part 83 (March 8, 1916), 13.

²⁹³ Charles A. Caramello, "They Had No Choice:" Images of Equines in the Great War", *Anglistik: International Journal of English Studies* 29.2 (2018), 76.

and sympathize with. A Mrs. Turnbull recognized the kindness and consideration displayed by British Tommies for their horses which stood in stark contrast to the negligence and abuses seen earlier in the war. She noted how their attitude was having a “positive knock-on effect on nearly all Allied nations, in how they treated and cared for their animals,” bettering their care and lessening the mental toll war would have on them.²⁹⁴ Such emphasis on the British love for equines can further be seen in wartime newspapers. In *The War Illustrated* published on December 30th 1916, one image was accompanied by a caption emphasizing that whatever “his own circumstances may be, the British soldier” always did “the best for his horse.”²⁹⁵ It was recognized that Russian horses, although “full of endurance” and filled with an “astonishing understanding of their masters’ wishes and intentions,” compared unfavourably in appearance to their British counterparts who were “probably the best tended in the world.”²⁹⁶ Even Lord Roberts, one of Britain’s prominent military figures throughout the First World War, articulated this desire for better attention to be paid towards the psyche of the animals when he prayed that the horses be given rest on landing overseas. He noted that it should be impressed on all commanding officers the absolute “necessity for animals being taken the greatest care of” and promoted the idea that men “should never be on the horse’s back” when it was possible for them to be on foot.²⁹⁷ Lord Roberts’ attitude towards their care and maintenance was matched by countless others like him, ensuring that as the war progressed more attention was paid to how war could affect these sensitive animals.

²⁹⁴ Stephen Wynn & Tanya Wynn, *Animals in the Great War* (Pen & Sword Books Limited, 2019), p. 109.

²⁹⁵ “Accommodation for Man and Beast on Service”, in *The War Illustrated* (December 30th, 1916): 462.

²⁹⁶ “Soldiers of Four Nations Warring in Romania”, in *The War Illustrated* (December 30, 1916): 472.

²⁹⁷ Steven J. Corvi, “Men of Mercy: The Evolution of the Royal Army Veterinary Corps and the Soldier-Horse Bond During the Great War”, *Journal of the Society for Army Historical Research* 76 (1998), 273.

Veterinary staff also played a major role in ensuring that better care and understanding was offered to horses, donkeys, and mules at the Western Front. In treating sick and injured animals, a link of mutual respect was instilled between veterinarians and horses that encouraged them not only to provide better care for the animals themselves but also to encourage all units to do the same.²⁹⁸ It was emphasized that the ability to alleviate pain and suffering while at the same time providing good horse care would not only make for a more effective working relationship, but also solidified the bond between soldiers and horses in combat.²⁹⁹ As the veterinary units were responsible for nursing these animals back to health and educating troops on proper care to avoid future illness and injury, they placed significant emphasis on recognizing how many animals were suffering physically and therefore, by association, mentally as well. The Royal Army Veterinary Corps and national humane organizations came to work together to “improve the lot of the army horse in war” by providing sufficient care and offering better instructions for maintenance to troops. Further, emphasis came to be placed on the humane destruction of horses that were beyond medical treatment, helping to relieve suffering of such animals and offering them a much kinder and more noble death.³⁰⁰ The essential trust and care that was encouraged to solidify the connection between man and horse was strengthened through veterinary care for these animals. The success of veterinary staff in impressing upon men working in horse units that horse welfare came before their own was suggested by stories published in veterinary literature and memoirs, of men sacrificing themselves for their horses. This was clear evidence of a greater mindfulness being paid to ensuring that these animals were kept in better health, both physical and mental.

²⁹⁸ Ibid, 280.

²⁹⁹ Ibid, 281.

³⁰⁰ Ibid, 281-83.

Such movements towards offering equines greater comforts in war and countering the idea of these animals as equivalent to motorized vehicles were matched on the home fronts of most nations. This is evident in the amount of visual and written representations of war horses being released to the public throughout the Great War. Photographs on propaganda posters and in newspapers sought to portray the animals as valued living beings as well as sources of labour.³⁰¹ At the same time, these photographs also encouraged a sense of equines as “bold warriors and tireless workers, or as victims of mass conscription, destruction, and wastage”. These images reflected the human point of view of the war horse question but also represented the “shared human and equine experience” and sought to emphasize the significance of these animals to the war effort while at the same time moving the people back home into immediate action to protect these unassuming equines.³⁰² Further, art and poetry also came to be dedicated to these animals, paying tribute to “the nobility, courage, unyielding loyalty and immeasurable contribution these animals played” in the war effort.³⁰³ Of particular notoriety was Fortunino Matania’s painting entitled “Goodbye, Old Man” which was completed in 1916 and distributed throughout the Allied nations. Fortunino Matania was an Italian born artist who moved to London, England in 1902 when he was offered a job as illustrator for *The Sphere*. Throughout the war, *The Sphere* chose to dedicate itself to becoming a “war weekly” in order to educate those at home on what was happening at the Front. While Matania was deemed eligible to fight for the Italian Army at the time, the British government (which was well aware of his incredible talent) chose to offer him a contract as an official war artist, an offer that he quickly accepted.

³⁰¹ Charles A. Caramello, ““They Had No Choice:” Images of Equines in the Great War”, *Anglistik: International Journal of English Studies* 29.2 (2018), 74.

³⁰² *Ibid*, 77.

³⁰³ Marguerite Helmers, “Fortunino Matania’s Goodbye, Old Man”, in *Portraits of Remembrance: Painting, Memory, and the First World War* edited by Margaret Hutchison and Steven Trout (Tuscaloosa: The University of Alabama Press, 2020), 212.

Throughout the war, Matania visited the frontlines in both Belgium and France in order to depict

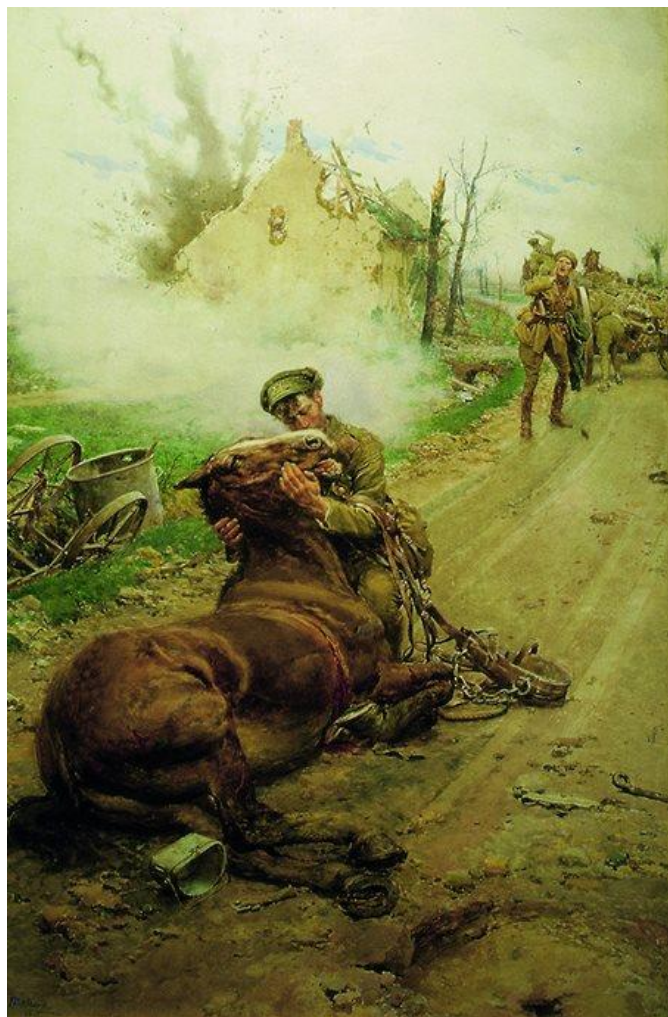


Figure 16: Fortunino Matania's "Goodbye Old Man".

the emotions and gripping images of the war as accurately as possible, showing the “conditions of the most dreadful horror” to the general public.³⁰⁴ In 1916, Matania attempted to tackle an emotional piece that could illustrate the connection some soldiers had with their horses in an effort to showcase this aspect of the First World War experience. The painting depicts a horse dying on the side of the road just outside of the city of Ypres in Belgium. It illustrates a young gunner who removed cart traces from the animal, putting himself at risk in order to comfort and say goodbye to the suffering horse. This is in contrast to

paintings from the romantic era, where war horses were depicted as glossy steeds “rearing rampant to underscore the power” of the commanders who rode them.³⁰⁵ In Matania’s painting, the horse is in obvious pain which highlights a sense of humanity seen in these animals that was being impressed on those not only charged with their care but also their families and friends back home. The painting acts as visual proof of the increasing concern for the war’s impact on equines

³⁰⁴ Ibid, 199-213.

³⁰⁵ Ibid, 199.

and the suffering they underwent at the war front, initiating significant shifts in animal care and welfare initiatives.

Of most significance when it comes to changes in understandings of the psychological capacity of the horse throughout the First World War is the number of societies and organizations that came into their own during this period. These include the Our Dumb Friends League and the Society for the Prevention of Cruelty to Animals (SPCA) which were formed during the Victorian era but increased the scope of their activities between 1914 and 1918 in an effort to influence how the public felt about domesticated animals. The SPCA was established in 1824 in an effort to prevent the abuse of carriage horses³⁰⁶ and to point out the fact that these animals had “qualities of human intelligence and morals, such as sentience and innocence.”³⁰⁷ With the rise of the middle class, disposable incomes, mandatory education, and a proliferation of printers and publishing houses, societies like the SPCA were able to spread awareness about their aims and advocate for the horses struggling to cope overseas.³⁰⁸ While many horses would continue to suffer during the war and well after, an increase in sympathy and understanding for the plight of these creatures further led organizations and programs to raise funds for the animals. For example, after the end of the war, a public appeal for funds was made to purchase 5,000 aged cavalry horses and to set up the Old War Horse Memorial Hospital to help those animals in need.³⁰⁹

Amongst the most prominent of these organizations was the Blue Cross, originally called the Our Dumb Friends League, which was founded in 1897 in London in an effort to care for

³⁰⁶ “Our History”, *SPCA International* (Accessed March 20, 2022), <https://www.spcai.org/about>.

³⁰⁷ Marguerite Helmers, “Fortunino Matania’s Goodbye, Old Man”, in *Portraits of Remembrance: Painting, Memory, and the First World War* edited by Margaret Hutchison and Steven Trout (Tuscaloosa: The University of Alabama Press, 2020), 207.

³⁰⁸ *Ibid*, 207.

³⁰⁹ *Ibid*, 214.

sick and injured horses working on the streets whose owners did not care for them properly. The charity furthered its work in 1912, when it launched the Blue Cross Fund to care for horses during the Balkan War.³¹⁰ Upon the outbreak of the First World War in 1914, the Blue Cross Fund was reopened and by the signing of the Armistice had raised nearly £170,000, the equivalent of almost £6.5 million today. This money went to care for the animals of conflict, allowing the organization to treat over 50,000 sick and injured horses and some 18,000 dogs in its hospitals across the Western Front.³¹¹ In order to fund this all-important work, the organization had to appeal to the public who needed to be convinced that they should be sympathetic to the plight of these animals. At the time, as the British public and that of other Allied nations struggled to cope with the realities of this new and frightening style of war being fought, citizens frequently turned to these animals as representatives of all that could be lost in battle. Images like Matania's went a long way in pulling at their heartstrings, inclining many animal-loving individuals to send money to support this effort. Through their ongoing support, the Blue Cross was also able to send veterinary supplies to more than 3,500 units of the BEF armies.³¹² Each of the supply packages contained drugs, bandages, horse salts and dressings, medicines, ointments, clippers, antiseptic, portable forges, and equipment necessary in order to euthanize horses who were suffering and too badly wounded to recover. They even sent out ambulances specifically designed for horses to the Western Front, each costing £2,000.³¹³

Throughout the war, the Blue Cross was able to do a great deal to relieve the sufferings of war horses. It did "splendid work by establishing hospitals behind the lines in many parts of

³¹⁰ "Our History", *Blue Cross* (Accessed March 24, 2022), <https://www.bluecross.org.uk/our-history>.

³¹¹ Stephen Wynn & Tanya Wynn, *Animals in the Great War* (Pen & Sword Books Limited, 2019), p. 100-101.

³¹² "Blue Cross World War One collection", *Blue Cross* (Accessed March 20, 2022), <https://www.bluecross.org.uk/blue-cross-world-war-one-collection>.

³¹³ Stephen Wynn & Tanya Wynn, *Animals in the Great War* (Pen & Sword Books Limited, 2019), p. 101.

France” and by gathering horses who fell wounded in battle.³¹⁴ It further held fundraising events which served not only to increase funds but also to provide a much-needed escape for many citizens at the time. For example, on September 7, 1917, it held a fete that was open to individuals of all ages where they could watch horse races and spend time together. This event was hugely successful and well supported, especially by the growing group of individuals who had a love of everything to do with horses and who had equine welfare at heart. These efforts were matched and supported by those of the RSPCA which also came into its own during this period. Together, by April 1917, their funds, which had been registered under the War Charities Act of 1916, went directly towards opening ten complete animal hospitals at the Western Front. These ten hospitals treated a staggering 364,000 horses, of which 262,080 recovered sufficiently to be returned to duty.³¹⁵ Even as late as November 16, 1918, the RSPCA and the Blue Cross together were still appealing for gifts and money to enable their continued work. These organizations were able to hold numerous events across the UK to raise monies for their charities and it seemed that every part of the country wanted to help them, reflecting an increased concern about animal wellbeing and safety. The RSPCA alone worked to raise £250,000, or around £12 million in current values, and their sponsored hospitals had treated 2.5 million animals by November 1918, returning about 80% of them to duty.³¹⁶ In order to raise sufficient funds to support these large programs, the RSPCA consistently appealed to the public in newspapers. For example, a representative from the RSPCA wrote to the editor of the *Scotsman* newspaper in December 1914 commending “the generosity of all lovers of horses” who helped them to support sick and wounded horses. Given that the people at home had “comparatively little conception of

³¹⁴ Ibid, 109.

³¹⁵ Ibid, 105.

³¹⁶ Helene Kedie, “How we helped animals during the First World War”, RSPCA <https://www.rspca.org.uk/-/blog-helping-animals-world-war-one>.

the terrible suffering which modern warfare” inflicted on the animals, the organization noted that they were working to “supplement the work” done, including “the training of competent assistants, the provision of motor lorries and ambulances, of medical stores and appliances, of rugs, of portable stoves for preparing food for the horses, and of anything and everything required for their care.” Pulling at the public’s heartstrings, it was frequently noted that there were “without doubt thousands of animal lovers” who desired to help the horses at the front and that there should be even more who desired to “help towards the success of” arms by assisting to nurse the animals back to health.³¹⁷ These messages brought increased donations and support, emphasizing the shift in the home front’s perspective of the animals of which they had previously taken advantage.

These cries for help were not only conveyed across the United Kingdom. The RSPCA also made appeals in America for further support. It was noted that the war was “taking the charitable and patriotic to the very utmost” but that there was “one especially worthy object” that should not be overlooked, that being “the alleviation of the sufferings” of horses. One appeal published in the *New York Times* newspaper on October 11, 1915 was made by Lady Olive Smith-Dorian who was the RSPCA’s president. She noted that “without horses war could not be waged” and that the “reduction of wastage among” the animals had to be put at the forefront of all BEF minds. The message further noted significant support offered by the French Government and that some 2,000 wounded French horses were cured in the organization’s stables. Given that over £3,000 per month was deemed necessary to continue to carry out this work, encouragement of subscriptions in America were emphasized.³¹⁸ As well, comparable networks existed for other Allied Armies. The French initiated the Purple Cross, for example, which focused on mitigating

³¹⁷ Stephen Wynn & Tanya Wynn, *Animals in the Great War* (Pen & Sword Books Limited, 2019), p. 101-102.

³¹⁸ *Ibid*, 102-103.

the sufferings of horses in war and securing further support from both the public and the government.³¹⁹ Through the work of all of these organizations combined, it is remarkable how much was accomplished; without that effort, thousands of horses no doubt would have died.³²⁰ These groups even ensured that the terms of the Geneva Convention were widened to protect the Veterinary Surgeon, the Horse Ambulance, and other Voluntary Aid Societies.³²¹ All of these efforts combined into some of the first glimmers of animal welfare sentiments, reflecting a changing attitude towards animals and a shift in the notion that animals were little more than tools or equipment. Through this charitable work, countless individuals felt sympathy towards the animals and began to visualize them as living beings deserving of protection rather than creatures who could neither feel nor express emotion.

While these efforts and movements were significant and noteworthy, the motivations behind campaigns to improve equine care and handling must also be analyzed. Despite the obvious positive nature of these changes, it cannot be forgotten that before and even during and after the war, reports of equines continued to take a logistical point of view. In official records from the time, equines were discussed in dispassionate terms and were considered to be ultimately expendable resources.³²² Also, even with the evident suffering of so many animals, the British War Office declined assistance from charitable organizations because the army had its own Veterinary Corps which it believed was sufficient. Perhaps authorities assumed that there would not be a large number of wounded horses, believing that they would be killed in combat instead.³²³ Regardless of motivation behind this apparent lapse in judgement, the lack of

³¹⁹ *Purple Cross Service for Wounded and Sick Army Horses* (St. Clements Press, Ltd.: London, 1915).

³²⁰ Stephen Wynn & Tanya Wynn, *Animals in the Great War* (Pen & Sword Books Limited, 2019), p. 104-105.

³²¹ Steven J. Corvi, "Men of Mercy: The Evolution of the Royal Army Veterinary Corps and the Soldier-Horse Bond During the Great War", *Journal of the Society for Army Historical Research* 76 (1998), 276.

³²² Charles A. Caramello, "'They Had No Choice:': Images of Equines in the Great War", *Anglistik: International Journal of English Studies* 29.2 (2018), 74.

³²³ Stephen Wynn & Tanya Wynn, *Animals in the Great War* (Pen & Sword Books Limited, 2019), p. 101.

endorsement by the British Government of groups that were dedicated to the care and understanding of equine needs and behaviour revealed an overall lack of sympathy in government to the plight of the horses. Even as organizations like the Blue Cross helped suffering British animals despite the insistence that this was not necessary, thereby saving the War Office considerable sums of money, no public money was forthcoming and a continued inability to see these animals as anything other than a means to the end was evident.³²⁴ Even amongst organizations like the Blue Cross and the RSPCA and their charitable members, there were ulterior motives behind their actions. The parties and events that were held as fundraisers for these groups primarily offered people a reprieve from the stress and uncertainty that characterized life on the home front. These events may ultimately have done less for the animals themselves and more to enforce a military ideal, with many events having a “strong military element” which encouraged those at home to continue to support the war effort and helped to encourage those men still left behind to join the fight.³²⁵ Even in letters that encouraged others to help fund the war horses, they were discussed as mindless creatures. An officer wrote to a friend during the war and mentioned the Blue Cross fund which he deemed to be well worthwhile to “send a ‘bob’ to.” He noted that it was for the benefit of sick and wounded horses but stated that the “poor dumb brutes” suffered in wartime, dumb in this context meaning mute.³²⁶ While he was still influencing others to offer a helping hand, the language used to discuss the animals carried with it the connotation that these animals did not necessarily deserve protection because they were increasingly seen as intelligent beings capable of expressing emotion and of speaking,

³²⁴ Ibid, 110.

³²⁵ Ibid, 105.

³²⁶ Ibid, 108.

a generally assumed landmark of intelligence, but rather because they were important to the war effort and therefore had to be supported.

Even amongst various forms of cultural expression there existed hidden messages that were less concerned with saving the animals because they were living beings and more concerned with helping those at home to cope with the realities of war. Affection for the war horse was a sentiment that fit neatly within the military masculine ideal and reflected societal expectations for behaviour towards horses. Victorians wanted to believe that animals themselves were capable of love and the idea that if the human should be the first to go, the animal would grieve their loss.³²⁷ This helped them cope with wartime pressures and the constant uncertainty of when anyone might be killed. Further, in foregrounding this image of a positive relationship between humans and horses, a glimmer of humanity in an otherwise inhumane war could be found. The horse had many faces throughout the First World War but in its popular portrayal as the recipient of the soldier's compassion and kindness as seen in paintings like "Goodbye, Old Man," it offered individuals "consolation by inferring that such humanity would be afforded to the soldier himself," a comforting notion for families at home worried about their men fighting overseas.³²⁸ With millions of families all across the globe losing family members during the war, they often found themselves having to work through private memory and sorrow. Alternatively, horses were seen as everybody's loss. Given that horses belonged to no one, they could belong to everyone. Thus, endowed with "attributes of nobility and selflessness" that families hoped were present in their own loved ones, horses allowed people to "express public, collective grief"

³²⁷ Marguerite Helmers, "Fortunino Matania's Goodbye, Old Man", in *Portraits of Remembrance: Painting, Memory, and the First World War* edited by Margaret Hutchison and Steven Trout (Tuscaloosa: The University of Alabama Press, 2020), 206.

³²⁸ Jane Flynn, "Sense and sentimentality: a critical study of the influence of myth in portrayals of the soldier and horse during World War One", *Conference on Critical Perspectives on Animals in Society* (University of Exeter, UK, 2012), p. 25.

which helped many to grapple with the reality of what was unfolding, while at the same time uniting them in favour of the war effort.³²⁹ As well, when portrayed as innocents, the horses' unquestioning bravery came to be such a popular theme for artists and writers primarily because it was comforting to know that these animals supported their human comrades and therefore could keep their real loved ones safe.

As well, the poetry and art surrounding the war horse, which on the surface seemed to be dedicated solely to understanding the psychological and emotional capabilities of these animals, was actually pushing another message. "Goodbye, Old Man", one of the most prominent images associated with the First World War equine experience, was actually commissioned by the Blue Cross Fund to be used on posters and distributed on the home front. While seemingly illustrating a tender moment between man and horse, this image was released to the public as a propagandist measure. Since the Blue Cross played on of these "affectionate testimonials for donations," it encouraged the use of such images less for the sake of the animals themselves. Even though the donations, for the most part, were then put towards the war equines anyway, such images continued to establish equines as creatures who needed help less because they were living and more because they were essential to the war effort. This painting alone inspired several volumes of sentimental and propagandist poetry, much of which directly pushed people to donate to the Blue Cross.³³⁰ Images like this came to act as a metaphor for human wastage but also served to pull at the heartstrings of the population as they encountered horrors. While greater attention

³²⁹ Marguerite Helmers, "Fortunino Matania's Goodbye, Old Man", in *Portraits of Remembrance: Painting, Memory, and the First World War* edited by Margaret Hutchison and Steven Trout (Tuscaloosa: The University of Alabama Press, 2020), 214.

³³⁰ *Ibid*, 206.

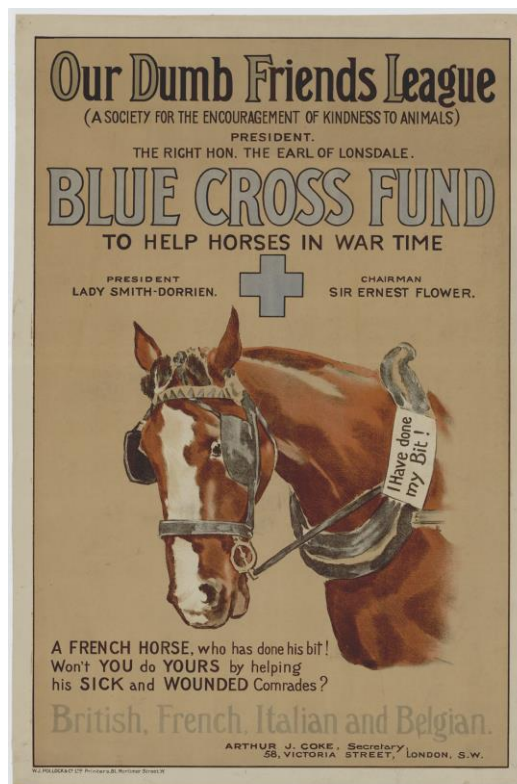
came to be paid towards the plight of horses, the animals continued to be emphasized as pathetically dumb comrades in arms.³³¹ Further, posters like one released by the Blue Cross showing an image of a clearly uncomfortable and afraid war horse wearing a banner that reads “I Have Done My Bit!” served not only to ensure consistent influx of donations but also worked to push more men to enlist.³³² If these creatures could put their lives towards the war effort, was it not time for all men to do the same?

Even works of poetry had hidden messages geared towards pushing recruitment and fund-raising. A poem written by an unnamed member of the Royal Scots Greys Cavalry Regiment entitled “A Cavalry Charger” reads as follows:

I'm only a cavalry charger,
 And I'm dying as fast as I can
 (For my body is riddled with bullets -
 They've potted both me and my man);
 And though I've no words to express it,
 I'm trying this message to tell
 To kind folks who work for the Red Cross -
 Oh, please help the Blue Cross as well!
 My master was one in a thousand,
 And I loved him with all this poor heart,
 (For horses are built just like humans,
 Be kind to them, they'll do their part);
 So please send out help for our wounded,
 And give us a word in your prayers -
 This isn't so strange as you'd fancy,

³³¹ Charles A. Caramello, ““They Had No Choice:” Images of Equines in the Great War”, *Anglistik: International Journal of English Studies* 29.2 (2018), 74.

³³² “Blue Cross Fund, Help the Wounded Horses at the War”, *Collections Canada*.



Library and Archives Canada / Bibliothèque et Archives Canada
 www.collectionscanada.gc.ca
 Figure 17: “Blue Cross Fund, Help the Wounded Horses at the War.”

The Russians do it in theirs.
 I'm only a cavalry charger,
 And my eyes are becoming quite dim
 (I really don't mind, though I'm "done for,"
 So long as I'm going to *him*);
 But first I would plead for my comrades,
 Who're dying and suffering, too -
 Oh, please help the poor wounded horses! I'm sure that you would - if
 you knew.³³³

At the core of this poem is this soldier-horse bond as a means to encourage those at home to send money to organizations like the Blue Cross. This certainly worked to help horses overseas but ultimately did little to encourage a more advanced understanding of the equine psyche or bring progress towards true animal activism and care. Even in photography from the period, the equine's role in assisting the war effort was emphasized. In one image from a wartime newspaper which shows men leading donkeys carrying supplies, it is made clear in the caption that these animals were important less so because they were living beings and more so because they were considered to be "the caddie of the trenches," being small enough to "go freely almost anywhere" and having remarkable endurance.³³⁴

Attention also needs to be given to the true reasons for commanders to encourage the soldier-horse bond that came to be increasingly prominent as the war years progressed and which, on the surface, seems to represent a shift in understandings of equines. While it is comforting to assume that these officers simply came to better understand that the animals were living beings that deserved exceptional comfort and mutual reliance, the reality is different. In times like the Great War, it was recognized that the horse was "almost as necessary in warfare"

³³³ "An Appeal", *Blue Cross Fund* accessed via *Hoover Institution: Library & Archives* Hoover ID: Poster UK 1085, Record Number XX343.17009 (1914/1918).

³³⁴ "Humble Helpers in the Great War of Liberation", in *The War Illustrated* (December 30th, 1916), 477.

as the soldier.³³⁵ Soldiers had to be pushed to connect more closely with their animals who were sent to fight so that they could function as a more effective fighting unit.³³⁶ This is why this connection was nurtured by the BEF. Also important was the fact that this strong relationship had the potential to keep both man and horse alive. A “driver who trusted his team, and horses who trusted their driver,” were seen to be “far more likely to come out unscathed” in war than those who did not.³³⁷ Further, given that the horse was forced into the war effort, it was seen as only right to “lighten his lot.”³³⁸ If armies nurtured this connection, which in many respects they did, then this was simply because they knew that this made the team a far more valuable weapon in war. Further, in encouraging men involved in equine care that their work was vital in keeping warhorses alive, armies could minimize unnecessary loss of equine life and reduce the frustration of attempting to bring fresh animals in. As well, the mutual reliance and pleasant companionship calmed the minds of men which made them more ready for battle and therefore more useful to commanders than those struggling to cope with their situation. Thus, this emphasis placed on the “sentimentally loaded assumption that *all* soldiers loved their horses to such an extent that they would have died for them and that the horses held the soldiers in equally high regard,” although unlikely, was instrumental in keeping troops moving as a well-oiled machine.³³⁹ Man and horse as a team came to be a “powerful weapon in the hands of a commander who knew how to husband the energies of the horses, as much as of the men, and how to spend them when the time

³³⁵ Ernest Bell and H. Bailie-Weaver, *Horses in Warfare* (London, War Office, by Animal Friend Society, 1913), p. 7.

³³⁶ Jane Flynn, *Soldiers and Their Horses: Sense, Sentimentality and the Soldier-Horse Relationship in the Great War*, New York: Routledge: Taylor & Francis Group, 2020), p. 11.

³³⁷ Jane Flynn, “Sense and sentimentality: a critical study of the influence of myth in portrayals of the soldier and horse during World War One”, *Conference on Critical Perspectives on Animals in Society* (University of Exeter, UK, 2012), p. 27.

³³⁸ Ernest Bell and H. Bailie-Weaver, *Horses in Warfare* (London, War Office, by Animal Friend Society, 1913), p. 7.

³³⁹ Jane Flynn, *Soldiers and Their Horses: Sense, Sentimentality and the Soldier-Horse Relationship in the Great War*, New York: Routledge: Taylor & Francis Group, 2020), p. 7.

came.”³⁴⁰ There was a difference between “men who fought with the animals and those who fought to save them,” but for officers and commanders, just enough of a bond to keep both parties moving efficiently was enough.³⁴¹ Therefore, many were less concerned with actually encouraging in men better care for the animals because they were living creatures that felt and subsequently deserved such treatment and more concerned with ensuring that numbers of capable men and horses could be maintained.

Finally, it should be noted that, despite considerable progress towards better care for animals because of a greater sympathy for them and a realization for their abilities to emote, negligence and abuse continued into the postwar period. As the war drew to a close and soldiers returned home, the same did not happen for the vast majority of war horses who had worked hard for the war effort. Some horses were able to find loving homes and families who cared for them. This was the case for Peter, the charger of Colonel H.E. Snell, who went to a family in Brussels and was treated like a “perfect gentleman.” Others were sent home.³⁴² Brocklebank, the personal charger of Sir Arthur Currie, was transported back to Canada after the war to find a home “on the farm of Currie’s brother in Western Ontario” where Currie could visit him and where he lived out his days in relative peace.³⁴³ King, the personal mount of Major-General Sir Edward Morrison, returned home in 1920, receiving a welcome upon his arrival that was befitting for a “veteran soldier who had been through every battle, march and siege of the war.”³⁴⁴ While this seems to reflect the idea that those involved in the war effort felt attachments for their animals

³⁴⁰ Alec Jeffrey Hill, *Chauvel of the Light Horse: A Biography of General Sir Harry Chauvel, G.C.M.G., K.C.B.* (Melbourne University Press, 1978), p. 48.

³⁴¹ Steven J. Corvi, “Men of Mercy: The Evolution of the Royal Army Veterinary Corps and the Soldier-Horse Bond During the Great War”, *Journal of the Society for Army Historical Research* 76 (1998), 283.

³⁴² Lt. Col. D.S. Tamblyn’s “*The Horse in War*” and *Famous Canadian War Horses*”, (Kingston: Jackson Press, 1920), 95.

³⁴³ *Ibid*, 77.

³⁴⁴ *Ibid*, 83.

and pushed to ensure a higher degree of care for them, these stories were rare and far from the norm. With nearly 24,000 equines “attached to the Canadian Corps” alone having survived to the armistice, questions had to be asked regarding what to do with these animals in the postwar period.³⁴⁵ Certainly equines fought gallantly but the potential cost of returning these animals to their homes meant that it was simply not “feasible to bring them back.”³⁴⁶ As a result, neither the British Army nor the charitable organizations serving the front would do much to repatriate horses to their rightful homes.³⁴⁷ Alongside these Canadian horses, only 62,000 English horses made it back home, but only after the intervention of Winston Churchill who was then the Minister of Munitions in David Lloyd George’s government. Of the 136,000 horses shipped to Europe from Australia, only one made it back home. By the end of the war, there were only 13,000 Australian horses who had survived, of which 2,000 were simply killed while most of the remaining 11,000 ended up in India for continued labour. Transportation to India was also expensive and time-consuming, but deemed more worthwhile since India would pay for these animals. Horses from New Zealand not required for continued use in British or Egyptian armies also faced a horrible end, with most simply being shot rather than sold, sadly because it was felt that new owners might not treat them well.³⁴⁸ By the end of the war, some 791,696 total horses had to be disposed of in one way or another.³⁴⁹

³⁴⁵ Dan Barnes, “Horses’ fate a sad story,” *The Great War: 1914-1918*, Originally published with the *Edmonton Journal* July 2004.

³⁴⁶ *Ibid.*

³⁴⁷ Marguerite Helmers, “Fortunino Matania’s Goodbye, Old Man”, in *Portraits of Remembrance: Painting, Memory, and the First World War* edited by Margaret Hutchison and Steven Trout (Tuscaloosa: The University of Alabama Press, 2020), 213.

³⁴⁸ Stephen Wynn & Tanya Wynn, *Animals in the Great War* (Pen & Sword Books Limited, 2019), p. 39.

³⁴⁹ Charles A. Caramello, ““They Had No Choice:” Images of Equines in the Great War”, *Anglistik: International Journal of English Studies* 29.2 (2018), 74.

Many of these poor animals were sold to Egypt and came to live in miserable conditions on the streets of Cairo.³⁵⁰ Despite efforts made by those who cared about the animals and who sent their personal mounts overseas, this was the sad reality for many war horses. For example, on March 19th, 1916, a woman by the name of Dora Spencer wrote a letter to the New Zealand Minister of Defence, James Allen. In this letter, she inquired about the government's plan to deal with horses once the war was over. She noted that none of her sons "were old enough to fight for the Empire" and so she had sent her favourite riding mare to be used towards the war effort. She wrote the letter asking that her horse be sent back to her when fighting ceased if she were still alive, even offering to contribute towards the cost of transit.³⁵¹ Her note was met with a negative response but was accompanied with an assurance that the mare would "most likely end her days in peace." Unfortunately, such information was falsely optimistic and all those animals who remained in Egypt after the war were either put to harsh work or were killed if they were deemed to be unfit for any other purpose.³⁵² Other horses were sold to the Belgian government after the war. Since the Belgian economy had been severely damaged during the war and its horse stocks had been depleted, Belgians were in desperate need of these animals to help rebuild the agricultural and industrial economy. Many came to work on these Belgian farms, continuing their challenging and difficult labour. Further, animals were sadly sold as meat to butchers in Belgium, being regarded as unfit for any other purpose.³⁵³ This is a sad fate for the creatures who were forced into war and fought gallantly, serving important roles and working tirelessly to keep

³⁵⁰ Marguerite Helmers, "Fortunino Matania's Goodbye, Old Man", in *Portraits of Remembrance: Painting, Memory, and the First World War* edited by Margaret Hutchison and Steven Trout (Tuscaloosa: The University of Alabama Press, 2020), 214.

³⁵¹ Dora Spencer, "Letter to the Honourable James Allen", *Archives New Zealand* (1916).

³⁵² "Dora Spencer letter, 1916", *NZ History* (May 16, 2016), <https://nzhistory.govt.nz/media/interactive/Dora-Spencer-letter-1916>

³⁵³ *Ibid*, 213.

the BEF war effort alive. It can be argued that this outcome demonstrates a lack of sympathy and understanding of these animals as living beings with the capacity to feel.

But, amidst the darkest corners of this sad story comes a light. While commanders primarily pushed the soldier-horse relationship as a means to ensure that they had a strong fighting force, the story was much different and more complex on a personal level from the soldier's perspective. For many soldiers fighting alongside their equine comrades, the connection that developed between them came to be "among the few bright things of the soldier's life"; for many, nothing touched them "more deeply than the mutual attachment of man and horse."³⁵⁴ Although it would be wrong to assume that all soldiers had the same degree of respect for their horses, there are sufficient examples to suggest that for some soldiers the plight of their horses made as great an impression upon them as that of their fellow men. Since animals could not talk, many soldiers felt intensely that they should not have been allowed there and that, since they were forced into fighting positions along the Western Front, it was the soldier's responsibility to be their voices and advocate for them.³⁵⁵ As the animals stood "patient and ready" to do their work in horrendous weather conditions, the men charged with their care saw in the eyes of their equines a glimmer of light that could not be seen in other tools of war, and significant emphasis came to be placed on properly caring for the animals on a more personal level.³⁵⁶ As years of intense fighting wore on, soldiers saw how war could impact the animals and understood more than anyone how they were feeling and how the constant bombardment could impact them. As a result, men grew attached to the animals and studied how they could adapt to their environments.

³⁵⁴ Sir Arthur Currie, "Foreword" in Lt. Col. D.S. Tamblyn's *"The Horse in War" and Famous Canadian War Horses*", (Kingston: Jackson Press, 1920), I.

³⁵⁵ Capt. M.D. Eder., "Psycho-Pathology of the War Neuroses", *The Lancet*, 12 August 1916, p. 266.

³⁵⁶ Sir Arthur Currie, "Foreword" in Lt. Col. D.S. Tamblyn's *"The Horse in War" and Famous Canadian War Horses*", (Kingston: Jackson Press, 1920), 5.

For soldiers like Private James Robert Johnston, the attachment that resulted between the men and their animals was powerful. Soldiers came to become firmly connected to their horses and felt strongly that the feeling was mutual. Johnston even suggested that the horse had “a better sense of the two” and that the animals took care of them to a profound extent.³⁵⁷ A significant portion of the soldiers fighting throughout the First World War were found to be “on good terms with their animals.”³⁵⁸

As the war progressed and soldiers came to witness how their animals reacted to the daily horrors and rigours of war, their bonds continued to intensify. In many ways, this soldier-horse relationship was so strong that soldiers came to risk their own lives for their horses, suggesting that they saw them as far more than simple tools to be put towards the war effort but rather as friends and companions who deserved to be protected and cared for. While soldiers could ultimately do little for horses in need as a whole, they often put themselves in mortal danger to say a final goodbye to their faithful comrades, not unlike what was portrayed in Matania Fortunino’s painting, “Goodbye, Old Man”. There were many accounts of soldiers doing the exact thing as the soldier in this work of art. For example, in the poem “The Prince” released in 1917, a young man was noted for raising a young horse which he weaned himself and spent countless hours with. Eventually, he and the animal were sent overseas to engage in the war effort. After countless close calls, eventually the two found themselves near an exploding shell. The young man was fortunate to survive due to the fact that his horse’s body shielded him but his Prince was not so lucky and was found to be in “dreadful agony.”³⁵⁹ As the life slipped away

³⁵⁷ Jane Flynn, “Sense and sentimentality: a critical study of the influence of myth in portrayals of the soldier and horse during World War One”, *Conference on Critical Perspectives on Animals in Society* (University of Exeter, UK, 2012), p. 27.

³⁵⁸ “A Mule Section, Obviously on Good Terms with Their Animals” from the French War Office Official Photos printed in *The Illustrated War News* Part 89 (April 19, 1916) 4.

³⁵⁹ *The Prince: A Canadian Great War Veteran’s Stories, chiefly concerning his Alberta Range Horse, as related to his Grandson on Christmas Day, 1950* (Alberta: 1917), 59-60.

from his warm, kind eyes, the soldier held the animal's head in his lap and comforted him as he drew his last breath. Later in the poem, the soldier even tracks down where his horse was buried to spend time at his grave, grieving the loss of his close friend and longing to "stroke his neck" and "feel the gentle touch of his warm nose" once more.³⁶⁰

In another example of such tenderness between man and horse, there was a story commonly spread of a man who gave his life for his four-legged companion. Troops had to clear out of an area quite quickly and a soldier noticed that a horse which had been struck by a shell was in great pain and was neighing for water. Unfortunately, there was none about and the Germans were rapidly closing in. This man wanted to make the animal comfortable before he

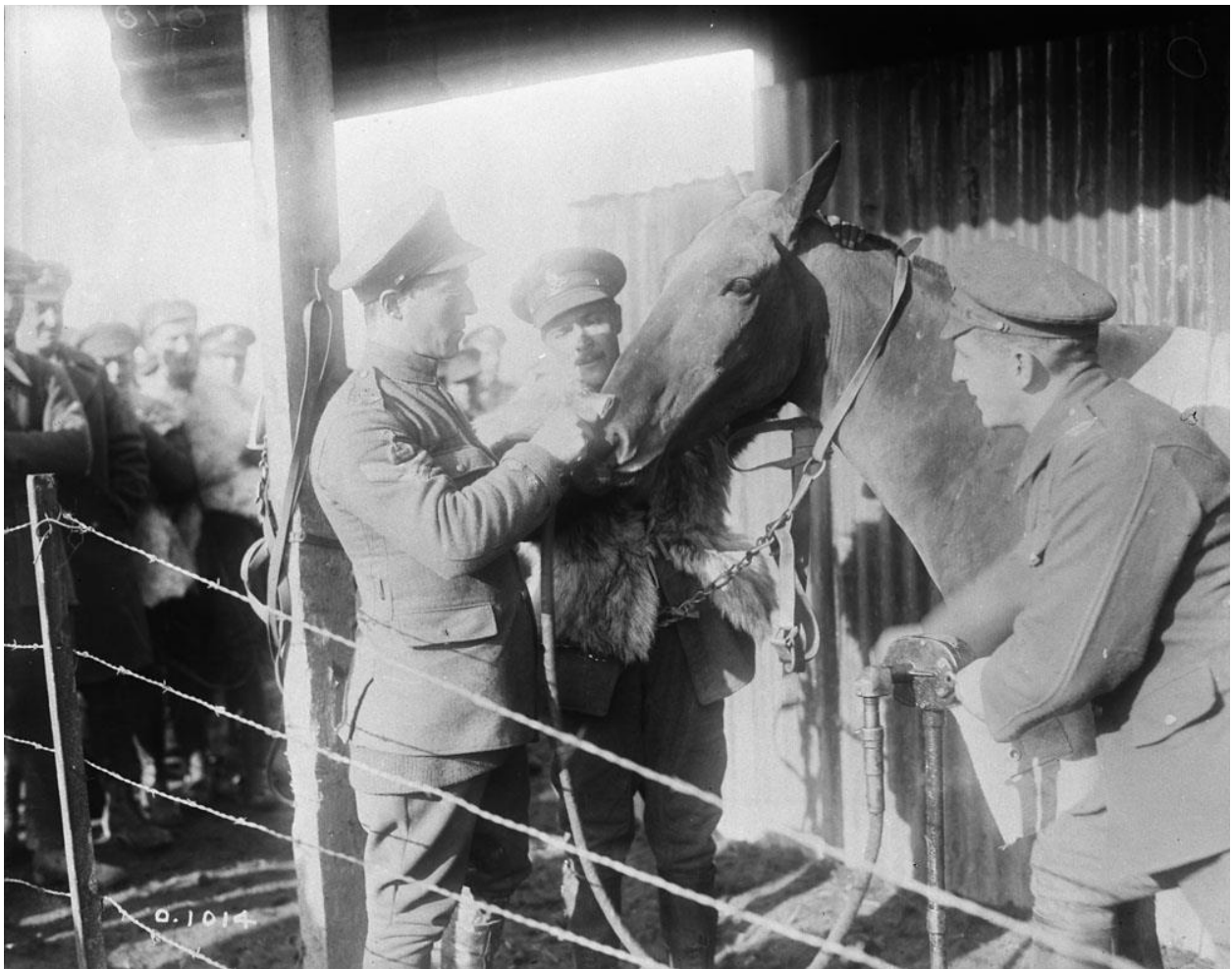


Figure 18: "A Canadian looks after this horse like a brother. November 1916."

³⁶⁰ Ibid, 63.

cleared off so he found water and brought it to the horse. Both he and the animal were later found killed by the oncoming German forces but this emphasizes the idea that men often sacrificed their own lives for their horses.³⁶¹ While this story cannot be confirmed and the man cannot be identified, soldiers like Thomas Dinesen, later the recipient of the Victoria Cross, noted that he and many others did dread “more than anything else seeing half-dead or shell-torn horses left behind along the roads,” stating that they felt “more compassion for suffering beasts than for human beings.”³⁶² Even walking by these deceased or dying animals seemed to offend the sensibilities of men more than the sight of dead and wounded soldiers, so there is little reason to doubt stories like the one of the heroic soldier bringing water to the horse. As well, soldiers were often found giving their equines as much comfort as they could before even taking thought for themselves, frequently feeding and watering them first after long marches.³⁶³

Thus, “even through the bitterest days of combat, even through the long, drab days and nights in rain-sodden camp or mud-filled trench,” the connection men felt towards their equines was the most powerful alleviating influence that they could be offered.³⁶⁴ The very work of “tending a horse was a distraction which relieved the trooper or the gunner from the otherwise unrelenting tension of warfare,” and many men emphasized sufficient grooming and time spent with their animals as a means to recharge their own minds and feel a semblance of humanity in an otherwise inhumane war.³⁶⁵ Horses softened the hearts of soldiers living in the maelstrom of violence, offering them comforts and companionship that could ease the men’s own pain and

³⁶¹ Marguerite Helmers, “Fortunino Matania’s Goodbye, Old Man”, in *Portraits of Remembrance: Painting, Memory, and the First World War* edited by Margaret Hutchison and Steven Trout (Tuscaloosa: The University of Alabama Press, 2020), 208.

³⁶² Tim Cook and Andrew Iarocci, “Animal Soldiers”, *Canada’s History* 93, no. 5 October 2013 (Accessed March 2022), p. 20-27.

³⁶³ Sir Arthur Currie, “Foreword” in Lt. Col. D.S. Tamblyn’s “*The Horse in War*” and *Famous Canadian War Horses*”, (Kingston: Jackson Press, 1920), 5.

³⁶⁴ *Ibid.*

³⁶⁵ *Ibid.*

suffering.³⁶⁶ Especially for soldiers heading overseas from rural areas where horses were common, the act of grooming, exercising, feeding, and watering the animals could be highly therapeutic. A degree of affection between horse and man came to exist on a large scale, with countless stories of relationships between soldiers and their equines, whom they turned to in order to find light and therapy in an otherwise very dark situation. The pride and respect soldiers came to have for their horses was reflected in how often they were photographed with them, and how “often they became central characters in their letters, diaries, and memoirs,” emphasizing them as the best and closest friends they could ask for at the Western Front.³⁶⁷ Dr. John McCrae, the author of the poem “In Flanders Fields”, found himself very attached to his horse Bonfire through the First World War. He held a very “deep affection for Bonfire,” having been through so much with him, and he would even write letters to his sister’s children from Bonfire’s perspective. These letters mentioned that Bonfire loved to eat blackberries and that he was being sent to the doctor to have a lump on his tummy examined, something that was clearly of importance to McCrae because the animal meant so much to him.³⁶⁸ Like McCrae, many soldiers even named their horses, illustrating how these animals were seen as active co-participants in the soldier’s life.³⁶⁹

Because these soldiers so valued this intense soldier-horse bond, many of them sought opportunities to make their horses’ lives easier and their letters, photographs with them, and poetry from the period is testament to the complex play of trust and respect between the two.

³⁶⁶ Tim Cook and Andrew Iarocci, “Animal Soldiers”, *Canada’s History* 93, no. 5 October 2013 (Accessed March 2022), p. 20-27.

³⁶⁷ Jane Flynn, *Soldiers and Their Horses: Sense, Sentimentality and the Soldier-Horse Relationship in the Great War*, New York: Routledge: Taylor & Francis Group, 2020), p. 2.

³⁶⁸ “Man’s Best Friend by Bonfire Jr., Guelph, Ontario”, *Veterans: Government of Canada* (Last Modified July 21, 2020), <https://www.veterans.gc.ca/eng/remembrance/classroom/tales-of-animals-in-war/2006/page4>.

³⁶⁹ Jane Flynn, *Soldiers and Their Horses: Sense, Sentimentality and the Soldier-Horse Relationship in the Great War*, New York: Routledge: Taylor & Francis Group, 2020), p. 4.

This is evidenced in the poem entitled “Martha” written by John Locke Bradford in December 1921. This poem details the story of a horse who fell in action and emphasizes a close reciprocal bond felt between the animal and her driver. It reiterates that the animal was gallant and noble and that the soldier who called her his stood by her even in her last moments, watching as the “love light” faded from “her kind eyes” with sorrow which she surely recognized.³⁷⁰ The very fact that the horses overcame countless unexpected stimuli on a daily basis and perished alongside men was seen to be enough proof that they felt as deeply attached to the men working with them as their human friends felt, and this connection grew as the war continued.³⁷¹ While for the commanders and those at home, a change in how animals were perceived through the First World War was emphasized more from a practical standpoint because the animals were integral to the war effort, for the soldiers these attachments ran far deeper. They genuinely felt, for the most part, that their animals deserved the utmost in care and understanding because they too were living creatures trapped in horrific circumstances.

³⁷⁰ John Locke Bradford, “Martha”, *The Blind Soldier and Other Poems* (Halifax: Imperial Publishing Co. Limited, 1921), 14-15.

³⁷¹ *Ibid*, 4.

Conclusion

Equines were highly significant contributors to the Great War and have long gone relatively unrecognized for their efforts in aiding the Allies to victory in 1918. While their roles in traditional war horse positions such as cavalry were rapidly diminished through the implementation of harsher weapons of war and the onset of fighting in trenches, this did not mean that horses were rendered entirely useless in this conflict. At the beginning of the war, there was a commonly held belief that new vehicles like the Ford Model T automobile could be relied upon for transporting troops and supplies to and behind the frontlines. However, due to the unreliability of these new machines, this dream was quickly shattered as soldiers were left stranded in the mud by vehicles which simply could not traverse it. With so many equines being sent overseas early in the war for cavalry divisions that had been disbanded, units turned to horse-drawn transportation of men, ammunition, and other supplies essential to the overall war effort. Thus, these animals stepped into positions left abandoned by mechanization and became essential for victory. With an estimated five to eight million horses, donkeys, and mules offering up their lives to the conflict, their efforts and the legacies they left behind cannot be ignored. Considering the fact that these animals were so important for their roles in transportation and therefore mobility of all British and American Expeditionary Force units, great attention had to be paid towards their care and management to ensure that equine wastage was reduced. At the beginning of the war, units working with horses, donkeys, and mules were often found to be inexperienced with equine care and consistently made significant errors that bordered on animal cruelty and resulted in countless animal deaths that could have been prevented. This early negligence pushed a spike in equine mortality which often left BEF units stranded at the Western Front with no hope of movement. As it was realized how significant these animals were to the

war effort, emphasis came to be placed on a variety of care categories which served to change how these animals would be managed and treated.

Early in the war, the practice of farriery was fairly primitive, and far from professionalized. As countless horses were sent overseas to fight at the Western Front, it was realized that the staff assigned to work on equine hooves were undertrained and lacked experience in this complex field. As a result, many horses were found to be suffering due to the conditions of their feet. Given the old motto 'no foot, no horse', this had the potential to severely hinder an army that depended on equines for transportation of men and supplies. As countless horses had to be euthanized due to negligence in this field, attention turned to mending this situation. Schools were set up for shoe-smithing and students hoping to graduate from such institutions had to prove their abilities before they could see action. Emphasis came to be placed on ensuring that nail injuries and other common ailments of the hooves were kept to a minimum, and that all horses in need had access to suitable shoes that could help them to traverse the harsh conditions at the front. These changes were impressive for the time but were ultimately made not because there was concern over the sufferings of these equines, but rather because these animals were so important to the war effort and were becoming difficult to replace. Thus, it was out of necessity that such efforts were enforced.

A similar movement could be seen in the area of skin care. With conditions at the Western Front being so grim and with the severity of the weather, countless equines fell victim to skin diseases that were exacerbated by a lack of attention to proper grooming. These animals frequently found themselves afflicted with serious conditions such as mange which came to be recognized as the decimator of equine troops. Mange had the power to wipe out many horses from each unit and spread rapidly, inflicting the hardiest of horses and necessitating their

removal to animal hospitals behind the frontlines. As it was recognized how many animals were being put out of work and even perishing from diseases such as these, units drew attention to following proper protocol when an animal was found to display symptoms of mange or other related illnesses. As well, veterinarians and commanders alike came to impress on men involved with caring for equines the importance of proper grooming and blanketing practices. All of these efforts represented an important push towards ameliorating the horrific conditions under which horses were kept. However, the reasoning behind such advances in this area of care lay in the fact that removal of so many afflicted animals was not only expensive and time-consuming but also had the potential to put troops at risk without having a reliable equine force to move them and their supplies.

Perhaps one of the most difficult aspects of caring for horses at the Western Front during the First World War was sufficiently feeding and watering all of the animals. Horses, having a very sensitive digestive system, require forage and consistent access to clean drinking water, a task that sounds simple enough on paper but was actually incredibly difficult given the harsh conditions that BEF armies were working under during this period. Fresh drinking water was difficult to source and forage became difficult to access, with native plants being eradicated by constant troop movement and battle, and with shipped supplies being frequently lost to German U-boat attacks. As countless animals were found to be perishing due to dehydration and starvation, efforts came to be made to offer these animals as much food and water as troops could possibly manage. Hay nets and other ingenious inventions were brought in to minimize how much food was lost in the mud, and schedules were made for watering stations to ensure that all animals received fresh drinking water. These efforts, combined with care of soldiers who were even found to offer their own water to suffering animals, ensured that the number of

equines lost to such afflictions was kept to a minimum. Again, these changes in care were certainly staggering for their time but were prioritized due to the absolute necessity of horses to the overall war effort; shortcuts were still taken later in the war, to the detriment of the animals.

Finally, change came in the area of psychological understandings of these animals. Before and early in the war, equines were seen as beasts of burden that did not feel nor express emotion. As a result, countless animals were abused and treated poorly, many of which subsequently perished. Exhausted soldiers were found to be overloading pack animals and some were even noted for having worked their horses so hard on difficult terrain that many of these animals were found to have feet that were filed down. As commanders came to recognize how many animals were lost to such thoughtless mismanagement, efforts were made to ensure that equine mortality rates were kept to a minimum. The army began to encourage a strong reciprocal relationship between soldiers and their horses and impressed upon them the absolute necessity of properly managing these animals. Similar shifts in animal welfare and management could be seen at the home front during this period, with charitable organizations such as the Blue Cross Fund and the RSPCA dedicating significant time to ensuring that proper funds were being supplied for the animals and that abuse and negligence was minimized. These efforts between commanders overseas and concerned people back home were certainly impressive and had a profound impact on ensuring that fewer equines were lost to poor handling. The true motivations behind such movements must be considered however. For commanders, having a strong fighting force strengthened by the soldier-horse bond was essential, especially as more units were at risk of growing disillusioned with the fight as the war dragged on. At home, ensuring a degree of sympathy and care for animals allowed organizations to maintain an income and also served to strengthen morale on the home front.

While certainly the majority of advances made were primarily geared towards ensuring a steady supply of equines that were essential in bringing the Allies to victory rather than a sudden awareness of the inhumanity of allowing such animals to suffer, a far more heartfelt story can be found when considering the situation from a soldier perspective. While certainly some continued to feel nothing for their four-legged comrades, many of the men fighting overseas genuinely cared for their horses and went to great lengths to ensure that they were kept comfortable and as safe as possible at the Western Front. Men were frequently found to be taking care of their animals before they even thought to care for themselves and many discovered that their shell-shock from the horrific trauma they experienced could be eased through their partnerships with these animals. As such, many soldiers dedicated a significant amount of time to caring for horses, donkeys, and mules and even tended to write home about them, proclaiming their love for their dear friends.

Given the material researched and presented throughout this project, some conclusions regarding the use of equines in the First World War and in warfare more broadly can be drawn. To begin, it must be wondered whether the use of horses in warfare is ultimately justifiable or not. This is a complex subject and one that sparks considerable debate. Certainly there were millions of human lives on the line and in a period where it was the norm to view animals from a more practical viewpoint as opposed to an emotional one, it is not at all surprising that these animals were turned to in the way that they were. Ultimately, however, the use of horses in warfare cannot be comfortably justified. Warfare is a human endeavour and it is the responsibility of humans to limit wartime suffering to as great an extent as possible. While it can be argued that using equines in the capacity that they were used throughout the First World War eased the toll war had on humans, it took a massive toll on non-human animals who did not have

the ability to voice their fears. Humans can decide for themselves to go to war or not but horses and other animals do not have the capacity to articulate concerns over these life-altering decisions and so should not be used in warfare as an overall principle. However, I would argue that if there was a situation in which equines needed to be relied upon for warfare as they were in 1914, then it is of absolute necessity that proper care and training be in place at the very start. Had more mind been paid towards properly training units assigned to equine care from the beginning of the First World War, losses of these animals could have been limited. Equine mortality as a result of negligence could have been almost entirely avoided, which would have not only benefited BEF troops who so heavily relied upon the animals for victory and survival, but would have further limited animal suffering.

It can further be inquired whether or not the use of horses in this war was effective and efficient. While not necessarily justifiable, the research conducted in this project emphasizes the fact that horses were of profound importance to the war effort because they were so effective in their roles. Without the equine ability to traverse complex lines and difficult terrain, the BEF forces fighting in the First World War would have experienced a very different wartime experience. Horses played significant roles in bringing troops in to relieve other units who needed to be removed for periods of time so as to avoid mental and physical exhaustion which put them at risk of making grave errors which could put their entire division at risk. Further, these animals were instrumental in moving supplies to units at and behind the frontlines, which allowed British Expeditionary Forces to continue the fight. Without equine contributions, the men fighting in the trenches would have likely starved to death and faced almost certain destruction with no ability to refresh their weaponry and restock ammunition supplies. Thus, when considering equines in this war, it can be definitively stated that they were effective in their

roles. Whether or not they were efficient is another story altogether. While they did perform their jobs effectively, horse-drawn transportation and movement were not entirely efficient. Moving supplies and troops using exhausted equines was challenging and time-consuming. While vehicles can endure significant wear and tear before they break down, horses require much more attention to keep them in working order. It was incredibly difficult to source forage for animals and give them the time they needed to eat such fuel before they could move forwards again. Therefore, long breaks were needed which halted supply lines. As well, horses are liable to spook or refuse to go forwards if they feel so inclined. The time needed to calm frightened horses or to entice stubborn animals to move would have been time wasted. Thus, while horses were ultimately effective in their roles in the First World War, they were not entirely efficient.

Finally, it needs to be noted and argued that although the situation as presented in this project was generally grim, the use of equines in this war did in many ways benefit veterinary science. I would argue that the mistakes that were made throughout the duration of the war in equine care and management practices contributed to a greater degree of understanding and knowledge in the field of veterinary science. While another project could be dedicated to this subject alone, it is evident that efforts made as presented in this thesis went a long way in preserving equine numbers and limiting wastage. Great lessons were learned and veterinary methods were changed and practices established that can still be seen even if only in faint glimmers today. For example, for the treatment of mange it is still common practice to use a sulphuric lyme soap to ease the symptoms of the condition. Although by 1918 veterinary studies and medicine were still relatively primitive and while mistakes would continue to be made, these shifts in care and changes in understandings went a long way in emphasizing the importance of

sufficient training for veterinary staff, therefore shaping, in some part, the veterinary medicine community.

While this thesis aims to shed light on this important aspect of First World War history, there are many other areas of this story that could be further explored if space and time allowed. For example, there were countless other areas of equine care that experienced impressive shifts during this period, including equine surgery and injury rehabilitation and care. As well, more could be learned about how equines were handled at the home front in the period immediately after the First World War, to better understand if these shifts in animal care lasted into the post-war period and how this potentially shaped how horses, donkeys, and mules were handled leading into the Second World War. Certainly far fewer animals were used by September 1939 but many troops still relied on them to fulfill certain roles. For example, the American forces regularly employed horses and mules on the battlefields of the Second World War to carry soldiers on patrol missions.³⁷² Finally, it would be interesting to explore in more detail whether or not these glimmers of light in the form of animal care initiatives could be fully seen as a recognition, if still dim, that equines had value beyond the practical. While at the core of these decisions to advance equine care was the practicality of preserving equine life for the war effort, particularly from the soldier perspective there existed some sense of the horse as an important partner. With increased attention paid towards how the animals could cope with difficult situations and how they could aid their human comrades to navigate hostile and unfamiliar circumstances, certainly there was a new degree of understanding that these creatures had the capacity to feel, and that they were not just machines. Unfortunately, limited sources and space constraints make it difficult to explore this concept fully in this project. Instead, this thesis aimed

³⁷² Lisa B. Auel, "Buddies: Soldiers and Animals in World War II", *Prologue Magazine* accessed via *National Archives* Vol. 28, No. 3 (1996).

to initiate a more poignant and detailed conversation regarding the war horse question and to highlight these animals for the important roles they played, while at the same time considering the efforts that were and had to be made in order to preserve equine life.

When considering Great War history, sufficient attention needs to be paid to the role that horses had to play in this conflict. Through their efforts in transportation, these animals were the key to victory and sufficient care therefore had to be afforded to them. Harsh lessons learned early in the war led to incredible advances that would alter the war horse and care for these animals more broadly. Shifts in animal care significantly reduced equine mortality rates and boosted morale for both soldiers and animals alike, thus working towards securing victory for the Allied nations in 1918. The role that equines played in the First World War cannot be forgotten, nor can the efforts made to correct early mistakes regarding their care. What also needs to be noted is why efforts like these were ultimately made and what this truly meant in the world of horse care. Overall, these advances were made to reduce loss of expensive and vital equines, but glimmers of hope could be seen in the soldier-horse relationships that were formed and that laid the groundwork for the deep affection individuals feel towards their animals today. The themes of animal care which were advanced during this period as presented in this project are just a few of the many that must be discussed in order to fill gaps in Great War animal history. This project serves as just a stepping stone on a path of discovery that will allow us to unearth equine stories and grant war horses the recognition which they so deserve.

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