

LESSON 10:

PRESERVING THE HORSE POWER OF THE ARMY

INTENDED AUDIENCE

High-school students; first- or second-year undergraduates in history, social studies, or science

LEARNING OBJECTIVES

- *Explain why Civil War operations took such a heavy toll on the health of horses.*
- *Describe and evaluate how surgeons and soldiers tried to care for horses.*
- *Identify the common health issues of horses.*
- *Assess how horses were treated in the field and how these medical endeavors furthered the development of veterinarian science.*

TIME REQUIRED FOR LESSON

Students can respond to the background question as a homework assignment. The role-play and debriefing will occupy an hour. The debriefing question is intended as a supplementary exercise to provide broader context to the classroom discussion.

KEY TERMS/WORDS

horses, transportation, veterinary care, forage

MATERIALS REQUIRED

Readings that accompany this lesson.

BACKGROUND QUESTION

About one million horses died in service in both armies during the war. The wear and tear was extreme, constant, and inevitable, since Civil War armies were dependent upon horses and mules to keep armies supplied and to keep them on the move. The South had 1.7 million horses and the North had 3.4 million at the beginning of the war. It did not take long for generals on both sides to exhaust their equine reserves. They were unrelenting in their demands on soldiers to properly care for their animals. An equine epidemic could imperil the military efficiency of the troops, especially in the Confederacy where horses became scarce during the final two years of the war. Although soldiers on both sides were overwhelmingly from rural areas and were experienced with riding and caring for horses, the exhausting pressures of war were so urgent that often the soldier's immediate needs—to get his own shelter, find water, and secure food—took precedence over the needs of his horse. During the 1865 Appomattox Campaign, for instance, Lee's men had been living for months on a diet that lacked half of the necessary protein to maintain muscle mass as well as sufficient calories to sustain body mass. These men were suffering from night blindness, scurvy, and diarrhea, and they could barely care for themselves, let alone the animals in their army. The desperation in the ranks was felt in Confederate stables as well. One Southern cavalry officer complained that his horses received between two and a half and five pounds of feed per day. "This is insufficient to

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keep the horses in condition,” a Confederate inspector wrote, “they must go down.” A horse was supposed to receive fourteen pounds of hay and twelve pounds of grain every day, and in some areas of the Confederacy the countryside did not have the resources to sustain such an unending demand.

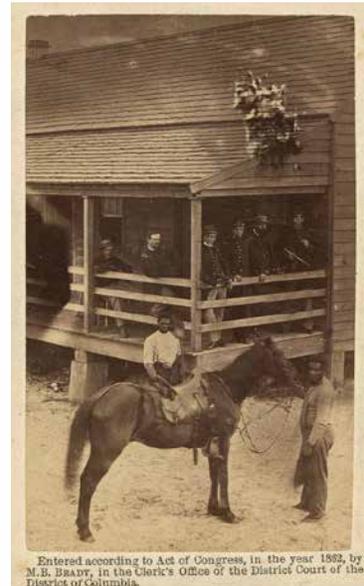
Even though Union armies were better positioned to care for their animals, neither side had a staff of veterinary specialists to provide rudimentary medical care. Some have speculated that there were fewer than fifty veterinarians in the entire country. Out of necessity physicians often assisted in inspecting the animals, treating injuries, and finding ways to contain the spread of disease in the corral. In battle horses were inviting targets since the killing of animals virtually paralyzed artillerymen who were unable to move their cannon. Shooting a mount might also injure an officer and thus imperil his ability to command in the field.

In the end, the greatest risk to horses was the daily grind of campaigning, of being used to move the army and to scout the enemy. Instructors may ask students:

- *What do the two letters below from Confederate General Robert E. Lee reveal about the role of cavalry in the Civil War, the importance of caring properly for animals, and the health problems that developed among the horses?*
- *Of all the demands facing a commanding general, what significance do you attach to Lee’s detailed observations about the condition of the horses?*

Robert E. Lee to George W. Randolph, November 7, 1862, and to J.E.B. Stuart on November 7, 1862, in *The Wartime Papers of R. E. Lee*, ed. Clifford Dowdey and Louis H. Manarin (New York: Bramhall House, 1961), 328-29.

[Lesson 10 Attachment 1]



African American men tending a horse, photographed by Matthew Brady circa 1862

Courtesy of Library of Congress Prints and Photographs Division Washington, D.C.



A soldier leading a horse, pencil drawing on tan paper by Alfred Rudolph Waud (1828-1891) artist

Courtesy of Morgan collection of Civil War drawings. Library of Congress Prints and Photographs Division Washington, D.C.

ROLE PLAYING QUESTION

Regulations prescribing how animals should be cared for often clashed with the reality on the ground. Have students imagine that they are senior officers in the Army of the Potomac and have been handed the diary of an artillery officer named Charles Wainwright. His notebook is filled with scathing criticisms of how little regard is given for the horses that pull the cannon. Assess his diary entries to answer the following:

- *What are the specific issues that cause Wainwright so much anxiety about his animals?*
- *What are the health problems plaguing his horses? Does he have any solutions?*
- *How should we understand why his superiors would be advocating policies that seem so violently opposed to the well being of the army's horses? It is critical that students try to understand the pressures confronting the army's high command which could lead them to advocate such policies.*



Auzoux horse hoof papier mâché model, on view in the "Broken Bodies, Suffering Spirits" exhibit
From the Mütter Museum Collection

Charles Wainwright, *A Diary of Battle: The Personal Journals of Colonel Charles S. Wainwright, 1861-1865*, ed. Allan Nevins (New York: Harcourt, Brace & World, Inc., 1962), 121, 124, 342-44.

[Lesson 10 Attachment 2]

DEBRIEFING QUESTIONS

The interdependence between horse and soldier was obvious to everyone in the Civil War, but neglect and a poor understanding of how sickness spread among animals doomed many horses. There were the ground truths of war: generals had to drive men and horses to be successful in active campaigning.

- *In looking at August V. Kautz's Customs of Service for Non-Commissioned Officers and Soldiers, students should assess how this handbook tries to contend with the reality of front line military service. How does Kautz awaken soldiers to their essential duties in carrying for animals?*
- *Do his recommendations address the underlying problems of an army that is always on the move, that routinely inhabits areas stripped of resources, and that is composed of soldiers preoccupied with their survival first?*

August V. Kautz, *Customs of Service for Non-Commissioned Officers and Soldiers* (Philadelphia: J. B. Lippincott, 1865), 55-60.

[Lesson 10 Attachment 3]

BIBLIOGRAPHY

Stephen Starr, *The Union Cavalry in the Civil War* (Baton Rouge: Louisiana State University Press, 2007)

WEB LINKS

New York Times article, “*The Horses of War*”

<http://opinionator.blogs.nytimes.com/2013/02/02/the-horses-of-war/>

Museum of the Confederacy program, “*My Kingdom for a Horse: Confederate Leaders and their Horses*”

<http://www.youtube.com/watch?v=fZYv-WDNi5Y>

Smithsonian Institution blog post, “*The ‘War Horse’ of the Civil War*”

<http://blog.americanhistory.si.edu/osaycanyousee/2012/04/the-war-horse-of-the-civil-war.html>

U.S. Army Medical Department, “*Evolution of Military Veterinary Medicine 1775-1916*”

<http://history.amedd.army.mil/booksdocs/wwii/vetservicewwii/chapter1.htm>

Pennsylvania Education Standards

(see <http://www.pdesas.org/standard/views>)

PA Core History and Social Studies standards

11TH GRADE

1.2.11.A-E; 1.6.11.A-B; 8.1.U.A-B; 8.3.U.A-D

12TH GRADE

1.2.11.A; 1.2.12.B-D; 1.6.12.A-B; 8.1.12.A-B; 8.1.U.A-B; 8.3.12.A-D

COMMON CORE 11TH-12TH GRADES

CC.1.2.11-12.A, B, I; CC.1.4.11-12.A, H, I; CC.1.5.11-12.A, D, G; CC.8.5.11-12.A-C, F, H; CC.8.6.11-12.H



Dead horses on battlefield, Gettysburg, Pennsylvania; barn in background

Courtesy of Library of Congress Prints and Photographs Division Washington, D.C.



Dead horse or donkey on battlefield, Gettysburg, Pennsylvania photographed 1863, printed later

Courtesy of Library of Congress Prints and Photographs Division Washington, D.C.



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TO
GEORGE W. RANDOLPH

**SECRETARY OF WAR
HEADQUARTERS, ARMY OF NORTHERN VIRGINIA**

NOVEMBER 7, 1862

Sir:

The enemy today occupied Warrenton, and his cavalry have reached the Rappahannock. The latter is reported to be at Rappahannock Station, White Sulphur Springs Ford, Hart's Ford. Two brigades of infantry reached Orleans yesterday. The last reports from our cavalry scouts indicated an intention on the part of their cavalry to cross the Rappahannock, though I have not heard whether it was accomplished. They are apparently advancing on the general route pursued by this army last summer, holding the gaps through the Blue Ridge as they progress. If they advance tomorrow with the same speed, they will reach Hazel River, about ten miles from this point. I have ordered back all surplus articles from Culpeper Court House and shall be prepared to move towards Madison Court House tomorrow if circumstances require it. I yesterday directed Genl Jackson to ascend the Shenandoah Valley in order to make a junction with Genl Longstreet. He will probably cross the Blue Ridge at Swift Run Gap should the enemy press forward, as I shall not resist his occupation of Thornton's Gap; where his large army would have great advantage, as the country there is flat and open. The enemy apparently is in very strong force, especially in cavalry, in which we are greatly outnumbered. Our cavalry diminished by the casualties of battle and hard service, is now reduced by disease among the horses, sore tongue and soft hoof. I will tomorrow begin to send back from Gordonsville all surplus articles that may have accumulated there, and I wish you would instruct the staff officers accordingly. I think such articles had better be removed towards Lynchburg. It has been snowing all day, and I fear that our men with insufficient clothing, blankets and shoes, will suffer much, and our ranks be proportionably diminished. The enemy's strength will however decrease the farther he removes from his base, and I hope an opportunity will offer for us to strike a successful blow. I beg that you will urge forward the defences and preparations at Richmond, and collect all the force you can.

I have the honor to be very respectfully, your obt servt

R. E. Lee

Genl

TO
GENERAL J. E. B. STUART

**COMMANDING CAVALRY
HEADQUARTERS, DEPARTMENT OF NORTHERN VIRGINIA
CAMP NEAR CULPEPER COURT HOUSE**

NOVEMBER 7, 1862, 9 A.M.

Your note of yesterday evening has been received. I am much pleased at the adroitness with which Col Rosser extricated himself from Warrenton & hope that none of his men were seriously injured. I very much regret to learn of the injury to your horses by scratches & sore tongue. The former I think by proper attention on the part of your men can be easily remedied, & the latter is probably occasioned or aggravated by feeding on the ground. I need not recommend to you to urge upon your officers & men strict attention to this matter. As soon as you can get exact information of the strength & movements of the enemy, let me know. As far as I can now see, he seems either to be operating by his right flank entirely, or is moving his whole army along the Blue Ridge. In neither case does it seem to me prudent to interpose his army between Jackson's and Longstreet's corps, which would be the case, if the movement you suggested was made. If Longstreet's corps be strong enough to contend with this force about Warrenton then it might answer for him to move upon them by Warrenton Junction. But if weaker, it might be crushed, if separated from Jackson by the Blue Ridge. Should we be pressed back from here my design is to retire through Madison, while Jackson ascends the Valley, so that a junction can be made through Swift Run Gap, we hold ourselves on the enemy's right flank if he attempts to proceed southward. As soon as I can learn something more of Jackson's movements and position, I will ride forward to see you, somewhere about Aestham River. I will send forward to let you know where. It will be a great thing if you can establish communication with Jackson with your signal corps, & thus with Longstreet. I have had no notice from Jackson of a want of ammunition, & presume he is supplying himself from Staunton. I will however attend to the matter. Try & husband your horses & men while watching the enemy as closely as you can.

Very respecty
R. E. Lee
Genl

SOURCE

Robert E. Lee to George W. Randolph, November 7, 1862, and to J.E.B. Stuart on November 7, 1862, in The Wartime Papers of R. E. Lee, ed. Clifford Dowdey and Louis H. Manarin (New York: Bramhall House, 1961), 328-29. The original Lee letters reside in the National Archives, Record Group 109, The Captured Confederate Records.

CHARLES WAINWRIGHT

A DIARY OF BATTLE

November 2, Sunday [1862]. For a wonder we are having a quiet Sunday, at a time when there is marching going on. It has been a most lovely day, clear and warm, with a soft gentle wind blowing and a sense of rest pervading all nature. We have a nice, clean camp on a good timothy sod, a few yards from the road, along which the Ninth Corps marched past us from about nine this morning until two in the afternoon. Tomorrow I suppose it will be our turn to move, while the Ninth rests. This is by far the best plan of marching when circumstances permit, as the men get a great deal more rest, and the roads do not block so badly ...

Everything so far has gone well, so far as our movements are concerned, but I find a terrible disease breaking out among the battery horses, which seems to be spreading very fast. The captains tell me that they first noticed it five days ago at Berlin, and already a large number in all the batteries are dead lame. The hoof cracks right around the crown, in some cases so badly that you can put your finger in between it and the crown. Should it spread much more we shall be helpless. General Ricketts has left the corps; politely relieved, by being placed in command at Berlin. General Gibbon has his division ...

Near Union, November 3, Monday. The weather changed last night, and today has been right cold, cloudy and with a high wind. We did not start very early, and met many detentions on the way, owing to uncertainty about the roads ...

November 9, Sunday. The disease among my battery horses, which first broke out at Berlin, has got to be quite a serious affair. With some of the horses the hoof is almost off; a few are attacked in more than one foot, and can barely stand, much less can they march. The same disease or some other attacks the horse in the mouth, which becomes quite black and covered with pustules, while the tongue swells so that they can hardly shut their mouths. I made an inspection through all the batteries this morning, and found 315 horses attacked more or less, about half of which are absolutely unserviceable. It seems to be spreading, and is very rapid in its attacks. I cannot tell what we shall do if it continues to spread ...

April 21, Thursday [1864]. Since Monday morning we have had fine bright sunshine. The peach trees are in blossom, and the leaves of the earlier forest trees bursting out from the buds. Still the snow lies white along the ridge of the Blue Mountains, and the nights continue to be cold

My monthly return of yesterday shew an aggregate present of 1,611 ...for the troops around here. We have had two more warning notes of a start, viz: the shipment of the most sick today, and the regulation of supplies to be taken at the start and the means of carrying them. Three days full rations in haversacks, three small in knapsacks, and ten in wagons, or sixteen days supply in all. Ten days forage is to be taken. How absurd such orders are! What are the animals to do the last six days? Or are they to live on nothing? From the start they are cut off from their hay fourteen pounds and the allowance of grain reduced two pounds, so that they may be said

to be placed on half allowance. When will our commanders give up this penny-wise and pound-foolish plan? If the proposed operations require sixteen days food for the men, they should require the same amount for the animals

April 24, Sunday. Spring is upon us now, almost at a jump. The last three days have been fit for June; fires are abandoned and replaced by open doors and windows. Today the air is heavy with the moisture of a strong south wind, betokening rain. With the warm days have come clouds of rumours as to the spring campaign and all that is to be done. The newspapers are full of dark hints, principally meant to make the public believe that the editors and correspondents know more than other people; which are all bosh. Every officer returning from Washington brings down his pockets full; quartermasters, having more transportation than anyone else, bring the most and the biggest. But among them all I have yet to see the man bold enough to attempt predicting what the first move of this army will be. One report says that Burnside's corps has left Annapolis, in steamers for somewhere; another that Baldy Smith, of whom Grant is said to have the very highest opinion, is getting up a strong army on the Peninsula. Common sense would say that these two were to make one command, to advance on Richmond from the James while we looked after Lee here; but then common sense has always been the rarest of the military qualities at Washington, and one cannot well imagine Burnside and Smith acting together after all the trouble they had at the time of and after the "mud march." . . .

I have figured out our transportation allowance, which is about as absurd as it well can be. I often wonder whether General Meade himself apportions the waggons or whether it is done by Ingalls; also, whether whoever draws up these orders has a special spite against artillery horses, or is utterly ignorant. The order allows one waggon to each battery for baggage, mess furniture, desks and the like, and three waggons for subsistence, and forage. Ten days' small stores and one day's meat for 140 men, about the average of my batteries, will with its forage take up one waggon (Captain Cruttenden says more), which leaves us two waggons to carry ten days' forage for 120 horses, or 6,000 pounds per waggon, beside the forage for its own teams! Five days' forage is all we can possibly manage, and then the loads will be very heavy at the start. As for loading five days' more on my artillery carriages, I can't and won't do it. Such absurdities as this take away all my pleasure and pride in my command. I wrote it all out for Hunt and sent it up to him. He replies in a most characteristic note, beginning: "The Jews of old were required to make brick without straw; anybody could do that if not responsible for the quality of the bricks delivered. You lose one waggon and are required to increase the forage carried from seven days to ten. Now that beats the Jews." Hunt is evidently discouraged, and beginning to give up all hope of our ever getting what is right. . . .

April 28, Thursday. We have got back one more waggon for each battery, which gives us three for forage instead of two; still we ought to have one more, for though I have taken eight from the ammunition train to carry forage for the batteries in, we shall be loaded too heavily should the roads be bad at the start, and will have to set out with some on the carriages. One forage waggon is to march with each battery. I have had all my train out for inspection. It looked very well: the mules are good and in capital order, the waggons all newly painted, and new covers marked with cross cannon and the corps badge.

My train now comprises 103 army waggons and eleven ambulances, and 781 horses and mules; the grand total of carriages of all sorts is 225, which when on the march, allowing fifteen yards to each, will cover just about two miles of road. Hunt writes me that the howl with regard to their losing one waggon per battery was universal, and thinks that with a little practise, so that we should “howl in unison,” we might really be able to accomplish something. There is just where the trouble has lain; several, I think most, of the artillery officers have heretofore leaned towards their corps commander, and for their own advancement have sought to please him; they have identified themselves with the corps to which they were attached rather than with the arm in which they belong. . . .

SOURCE

Charles Wainwright, A Diary of Battle: The Personal Journals of Colonel Charles S. Wainwright, 1861-1865, ed. Allan Nevins (New York: Harcourt, Brace & World, Inc., 1962), 121, 124, 342-44. The Wainwright journals are held by The Huntington Library. Used with permission of The Huntington Library, San Marino, Calif.

THE CAVALRY SOLDIER

The cavalry soldier is apt to look with some contempt as he rides by the weary footman carrying his knapsack; but he should bear in mind how much he is dependent upon him, and how much of the confidence with which he rides to the front is due to the staunch columns of infantry he leaves in his rear, and how soon he may be compelled to seek refuge from the enemy's sharpshooters and artillery in the rear of the same columns of infantry.

A cavalry soldier should not exceed in weight one hundred and sixty pounds, should be active and strong, physically sound, with a natural fondness for horses and experience in handling them. His duties are more arduous and severe than those of the footman. His first care should be his horse at all times. The two are inseparable, and one is of little account without the other. A dismounted cavalry soldier, leading a broken-down horse and trudging wearily along in the rear of the column, is a pitiable and ridiculous sight; whilst the perfect cavalry soldier, neatly dressed, arms and accoutrements in perfect order, his horse well fed and thoroughly groomed, and riding with ease, grace, and self-possession, is always an object of admiration.

The general duties of the cavalry soldier are the same as those of the infantry soldier, varying only on account of his horse and the difference in the character of the service.

Great care and attention are necessary to keep the horse in condition for service. The following hints are offered: —

The horse should always be used moderately, having much additional weight to carry. The habitual gait of cavalry is a walk, and it should not be increased, unless necessary or acting under orders.

Horses should never be watered or fed when heated, nor should they be used violently.

Immediately after watering or feeding. Heating food, such as corn or wheat, should not be fed in large quantities at a time, but divided into two or more feeds; and this is particularly necessary when hay or grass is scarce. They should be fed salt two or three times a week.

The horse should be carefully groomed. When heated, in cold or chilly weather, particularly in the open air, if required to stand still he should have a blanket thrown over him until he is cool; nor should he be washed or drenched with water, except when cool. If covered with mud, it is better to let it remain until the horse is dry, and then let him be groomed as soon as he is dry: it should not be permitted to remain any longer than necessary. If the mud is rubbed off when wet, it causes the sand to be rubbed into the skin, and is much more difficult to remove afterwards.

The back should always be examined after riding. Any evidence of soreness should be arrested by a judicious folding of blanket and care in adjusting the saddle, by shortening or lengthening the crupper. Any swelling or scalding from the saddle should be frequently washed in cold water, to check inflammation.

When halting on the march, horses have a disposition to roll, that frequently injures the saddle and accoutrements. This may be in a great measure prevented by removing the saddle and rubbing the horse's back with currycomb, brush, or a whip of straw or twigs. During such halts, every opportunity to let the horse graze a little, or feeding him on a handful of hay or grass, or other feed, gathered by the way, should not be neglected: the horse's stomach is small in proportion to his size, and such care of him will keep him in good condition where without it he would break down.

When a horse gets sick, the veterinary surgeon should at once be consulted. Soldiers are not permitted to prescribe for their horses without permission from their company commanders.

The horse has been found to be demoralizing to the habits of the soldier. The cavalry service removes the cavalry-man more from the immediate control of his officers; he is enabled soon to become more familiar with the surrounding country, on his duties as messenger, orderly, foraging, reconnoitering, picket and outpost duty, his temptations to straggle and commit depredations are much greater, the chances of detection are less, and the violation of orders is attended with much less personal fatigue and inconvenience; and hence the irregularities peculiar to the cavalry service.

Cavalry-men, however, should bear in mind that these facilities are no excuse for misdemeanors or irregularities; and every soldier should have the interests of his own corps too much at heart to aid or abet in misconduct that gives to his arm of service such a disagreeable notoriety. He should labor to give his own corps as high a reputation for good conduct as the foot-soldier. He should not allow himself to be excelled in propriety by the infantry-man.

The arms and accoutrements of cavalry, being more numerous and subject to more wear and tear, require more labor and attention than those of infantry, but should not for that reason be any more neglected. This care is equally important, and the beneficial results of cleanliness and order are quite as satisfactory, as in any other arm.

Every article that is issued to the man has its use and importance. The articles should be frequently overhauled, and kept in repair. The sabre should be kept sharp, the arms clean and in order, the ammunition close and compact, to prevent rubbing, and secure against moisture. The straps should be kept repaired, well cleaned and oiled. The nose-bag and lariat-rope are not sufficiently appreciated. The health of the horse is dependent upon his being taught to eat his feed from the nose-bag, as feeding from the ground causes the horse to take up with his food great quantities of gravel and sand, thereby injuring his digestion. The lariat-rope is important for the purposes of forage— either for the transportation of forage, or picketing the horse out at night to enable him to graze, the opportunity for which should never be neglected.

An important article is a forage-bag, made like a saddle-bag with a slit in it. It should be at least a yard long and a foot wide, in which to carry one or two feeds, so that accident or delay will not deprive the horse of his regular feed. It can be readily made by any soldier out of an ordinary grain-sack.

SOURCE

August V. Kautz, Customs of Service for Non-Commissioned Officers and Soldiers (Philadelphia: J. B. Lippincott, 1865), 55-60.