Chapter 8

MILITARY EQUINE PROGRAMS

CHERYL D. SOFALY, DVM, MS * ; DALE R. BEEBE, DVM, MS * ; JASON R. CRAWFORD, DVM, MPH ‡ ; AND NOLAN A. WATSON, MLA ‡

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^{*}Colonel, Veterinary Corps, US Army; Director, Department of Defense Military Working Dog Veterinary Service, 1219 Knight Street, Joint Base San Antonio-Lackland Air Force Base, Texas 78236

^{*}Lieutenant Colonel, Veterinary Corps, US Army; Command Veterinarian, US Army Special Operations Command, 2929 Desert Storm Drive, Building E-3525, Fort Bragg, North Carolina 28310

[‡]Major, Veterinary Corps, US Army; Resident, Veterinary Pathology, Joint Pathology Center, 606 Stephen Sitter Avenue, Silver Spring, Maryland 20910 [§]Army Medical Department Regimental Historian, Army Medical Department Center of History and Heritage, Medical Command, 2748 Worth Road, Suite 28, Joint Base San Antonio-Fort Sam Houston, Texas 78234; formerly, Branch Historian, Military Police Corps, US Army Military Police School, Fort Leonard Wood, Missouri 65473

"Look back on our struggle for freedom, Trace our present day's strength to its source; And you'll find that man's pathway to glory Is strewn with the bones of a horse."

-Author unknown

INTRODUCTION

No other animal has proven itself more meritoriously in battle, nor borne the high cost of war throughout the ages than the horse. The stories of horses' valor and sacrifice have largely gone unheralded through time. Yet these loyal, stoic, and gentle creatures capture our imagination like none other can. In this modern age, horses are primarily used for more leisurely pursuits; however, the qualities that are highly prized by competitive equestrians today—speed, endurance, intelligence, and courage—owe their origins to ancestors bred for the battlefield.

To this day, horses and mules continue to serve humbly and gracefully in many capacities. They lend dignity to time-honored ceremonies, serve soldiers' needs on the battlefield, and help train the next generation of warriors. Thus, it is fitting that the US Army equine's contributions to military service are honored in this chapter, which focuses on the history of the mule and horse in recent military conflicts, outlines the contributions that equines make to US service members, and describes the role that military personnel and veterinarians play in the long-term care of this valuable resource.

HISTORICAL USE OF EQUINES IN WARFARE

The use of horses in conquest and warfare stretches back through the centuries. In all likelihood, horses were employed in military actions shortly after their domestication, generally agreed by scholars to have been between 4000 and 3500 BCE. 1,2,3 A horse's agility, speed, and ability to move great distances in less time than conventional foot soldiers vastly changed the battlefield tactics of military commanders throughout the world. In battle, a horse's very presence projected fear into an opposing force while simultaneously bolstering confidence within its rider's ranks (ie, the horse is one of the earliest methods of effective psychological warfare). Cavalry tactics were developed as early as 1250 BCE by the Assyrians and continued well into the 20th century, when advances in modern technology, specifically mobile armor and light machine guns, rendered the horse's service largely impractical for large-scale, direct engagement with enemy armies. 4 In addition to using horses in cavalry force campaigns, draft horses, mules, and donkeys contributed to ancient war efforts by carrying the supplies, baggage, and implements needed to lay siege to enemy fortifications.

Napoleon and Frederick the Great are credited with the adage, "An army marches on its stomach." Draft animal power gave their armies advantages during movements: an extension to the geographical range of a well-supplied army and an extended sustainment of a military campaign. These "baggage trains" required incredible coordination of movement to route supplies to the correct area at the critical moment of battle. Draft animals were not typically regarded in the same romantic sense as classic mounts for battlefield maneuver. Nevertheless, they frequently engaged in battle and were often specifically targeted by enemy forces to disrupt supply routes, win materiel that was in a critical shortage, deny resupply to friendly forces, and plunder for personal gain.

Equine Procurement and Care in the American Military in the 18th and 19th Centuries

American Revolution to the Mexican War

As the fledgling American Army formed to secure freedom for the colonists, there was definitely a need for horses. Developing a system of acquiring and maintaining the animals' health was more complicated. Many Revolutionary War officers and members of dragoon units entered service with their own mounts. Although there were allotments for these personal animals used in service, the increasing demand for equines to support artillery and supply efforts required additional horses to be brought into service. These larger draft horses needed for military service were usually not selected or removed from a family farm. As the war progressed, they were purchased for Army use at various auctions or through designated suppliers.⁵ Once either privately owned or purchased animals started their service, their owners and units received allowances for their animal's forage from newly appointed quartermasters.6

Not very much is known about the examination of animals purchased for early Army use, nor about those that were brought into service by their owners. Horses were a part of everyday life in the colonies and were fairly plentiful; mules were not common. Horses were often cared for by their owners, although some animals were specially attended to by farriers. During this time, farriers did not simply shoe horses, they spent the majority of their time with these animals and were also often charged with providing care and advice for horse ailments and injuries. Horse maintenance was their vocation.

Similar to human health of the 18th century, animal medicine was rudimentary and still developing; hence, knowledge of disease causes and formal education about equine health was unknown in America. (For more information about the evolution of veterinary education, veterinary services in the military, and historic military equine missions, see also Chapter 1, Military Veterinary Support Before and After 1916.) Dr Everett B. Miller, author of the journal article "Veterinary-Farriery Services in the Continental Army April 1775–May 1777," describes the farriers of the American Revolution as "uneducated [due to the lack of a veterinary university in America], but not necessarily unskilled," as there was usually an apprenticeship system in place."

As far as can be determined, the position of US Army farrier is first mentioned in a letter from General George Washington to Elisha Sheldon, the newly designated commander of a "Regiment of Horse" (ie, cavalry). The letter, dated December 16, 1776, outlines the composition of the unit and its requirement for farriers. Subsequent dragoon and cavalry units would follow the letter's instruction and maintain the requirement for farriers. Later, on January 16, 1777, General Washington wrote a similar letter of instruction providing for farriers in support of artillery units.

The requirement for Continental Army farriers mirrored that of the British Army, which used farriers in uniformed service. American Army farriers could be in uniform or contracted employees often directly hired by the local commander. Considering the need for equine care in the standing armies of Europe, other countries adopted similar arrangements. For example, reports indicate that Baron Von Steuben, the well-known Prussian advisor to the early American Army, was accompanied by a farrier from Germany. ¹⁰

Not much is known about the treatments for military animals serving in the Continental Army, but equines were injured with contemporary war wounds such as saber strikes, gunshots, and artillery fragments. Wounded and ill horses may have been bled or blistered (as with human treatments of the 1700s), bound

to immobilize battered limbs, or given experimental concoctions of "medicinal material." ^{10(p37)} Vinegar and purgatives were popular remedies. Continual troop movement also caused problems, and an official notification was ordered to end the use of horses being worn down "very cruelly, by riding them extremely hard on all occasions." ^{7(p112)} Limited and improper forage led to starvation in some cases.

At the end of the Revolutionary War, horses remained an important component in Americans' transportation, commerce, and investments. In the early 1800s, Congress was still receiving requests for compensation for personal horses injured or lost during the American Revolution. Farriers also were included in future plans for the small American Army, but very few were needed.

By the 1830s, the job titles used for and education of farriers began changing, including references to farriers as "veterinary surgeons." At the same time, animal care publications began to receive more attention within the United States. These journals and booklets were slightly more scientific than previous manuals of the 1700s and tended to blend the traditional trade duties of farriers (eg, shoeing and grooming) with more in-depth and learned veterinary skills (eg, disease prevention and animal health functions and remedies). Even so, there was still no formal veterinary education system in place in America, and the titles "farrier" and "veterinary surgeon" were often wrongly confused or used interchangeably as synoymns¹² (Figure 8-1).

The reinstatement of dragoon units in the 1830s expanded military farrier use. Because the units depended on the health of their mounts, commands increased the scrutiny of their animal caretakers. As described in the 1835 General Regulations for the Army, Inspector General reports were to record the competency of veterinary surgeons (the term "farrier" was also used) to determine if "horses were shod in the proper manner...," and if the farriers were able to observe disease, "...especially the glanders...."

Six months after the War with Mexico ended in August of 1848, Congress approved the "hire of veterinary surgeons" and the purchase of "medicine for horses and mules." This contractor-type appointment lasted through the following year, and payments were made through the Quartermaster Department. ^{14(p117)} As far as can be determined, this economic arrangement continued until the Civil War.

The American Civil War

In 1855, Captain George B. McClellan was sent to observe the Crimean War. After viewing the European struggle, he recommended several improvements

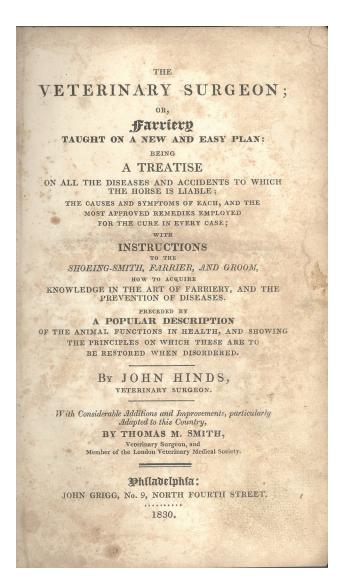


Figure 8-1. Title page of a veterinary medical book from 1830. Note how "Veterinary Surgeon" and "Farrier" are used as almost the same term.

Courtesy of the AMEDD Center of History and Heritage Archival Collection, Ft Sam Houston, Texas.

for the American Army. One suggestion was for the Army to create a veterinary school and adopt the veterinary systems he observed at the Berlin and Vienna veterinary schools. ^{14(p123)} Ultimately, the report did not receive enough attention to warrant action.

When the American Civil War began in 1861, horse procurement was similar to previous practices, with the Quartermaster Department purchasing government equines through auctions or designated suppliers. Once again, some service members brought their own animals into the Army. After veterinarians became a slightly more permanent part of the Union

force in 1863, they inspected animals purchased by the Quartermaster Department and helped enforce a better health standard. One potential reason for veterinary inclusion in the Union Army was the large expense the US government incurred replacing unhealthy animals.

Estimates for the number of horses and mules lost during the war range from 1 million to over 1.5 million.¹⁵ As with previous conflicts, battle wounds were a hazard, but the horses and mules that died in service were predominately lost from exhaustion, insufficient forage (an army with horses needs a large, continuous supply of food), and disease. Glanders was the preeminent disease spread across America by Civil War horses during and after the conflict.^{14(p164)} Because the war bogged down to attrition in some areas, even healthy horses died; some units were forced to slaughter hundreds of horses in an effort to deny the enemy their animals before they were captured (Figure 8-2).

Despite the tremendous animal losses during the Civil War, veterinarians were treated somewhat better than in previous wars. Not only were they perceived to be of some assistance, they were gaining acceptance in the Army, and War Department General Orders 195 and 137, dated May 12, 1864, provided for the purchase of "horse medicines." ^{14(p152)} Items included in the purchases resemble contemporary substances used for human patients and were certainly an improvement over the bloodletting treatments of only a few decades before.



Figure 8-2. Although the majority of equine losses during the Civil War were not battle-related, they occurred with some regularity. This image demonstrates some of the aftermath of the Battle of Gettysburg. The 9th Massachusetts Artillery Battery (Bigelow's) went into battle with 110 horses; after the battle, the unit had only 22 horses.

Reproduced from the Library of Congress online. http://www.loc.gov/pictures/item/2013645105/. Accessed January 5, 2016.

George F. Parry, a graduate of the Boston Veterinary Institute, was one the earliest formally educated veterinarians to serve with the Army. Contemporary accounts from his Civil War diary of his service with the 7th Pennsylvania Cavalry Regiment highlight his duties as well as some equine treatment and healthcare challenges. In addition to writing about inspecting and classifying the horses into four classes according to War Department orders, Parry mentions pressing charges against two soldiers who abused their horses, perhaps by running them too hard. (Parry requested these men be transferred to the infantry.) Earlier in the war, he addressed potential public health concerns after animals died during combat in inclement weather. One journal entry written near Murfreesboro, Tennessee, on July 3, 1863, describes the sight of dead horses and mules floating by in the nearby, flooded Stone River. 16

Parry also notes the number of horses that were starving to death as the war progressed. In 1864, reportedly hundreds suffered this fate. Equally as distressing to this veterinarian was the fate of those horses that did have enough forage. According to his journal entry from March 10, 1865, the forage issued to the regiment since March 1, 1865, may have been spoiled; recounted testimony from the forage master and veterinary surgeons suggests that previously healthy horses suffered from diarrhea after eating the bad food and, consequently, many died. The fact that a veterinarian was there to care for the sickened animals and, perhaps save some, could be viewed as a sign of progress.

Post-Civil War to the Spanish-American War

After the Civil War, equines were relied upon to maneuver through the vast expanses of the American West and Great Plains in pursuit of Native Americans and to patrol border areas. Although the Army's size decreased, new cavalry units formed, and veterinary personnel were attached to keep these units' animals healthy.

Equines that were not of use to the government, either because of age, ill health, or the shrinking size of the military, were put up for auction. Unfortunately, the scrutiny the animals underwent during their initial purchase was not observed when the animals left service. This lack of attention further contributed to the spread of glanders to areas that were formerly disease-free, and it took many years to stabilize the disease and prevent further equine fatalities.

Veterinary professional recognition and equine care both progressed and suffered setbacks in the period following the Civil War. Because the horse population significantly decreased after the war due to various factors including glanders, a new importance was placed on the remaining animals' well-being. The increase in horse value beneficially coincided with increasing post-Civil War educational opportunities for veterinarians. The founding of more American universities in the 19th century fostered more formal veterinary education, and education and experience requirements were codified by Army regulations and General Orders in 1877 and 1879.

Unfortunately, increasing the number of academic veterinary medicine institutions and mandating elevated knowledge and skill sets didn't equate to immediate universal acceptance of the veterinarian as a recognized professional with specialized animal medicine training. For example, instead of hiring a veterinarian, in 1868, Congress hired a farmer and paid him \$10,000 to treat lameness in the Army's horses by trimming their hooves in a special way. Similarly, equine medicines were often distributed to untrained unit commanders or quartermasters instead of skilled, university-educated veterinary personnel.¹⁴

Despite the setbacks, equine health prospects improved further as the years passed, thanks to the innovative knowledge gleaned from postwar research. A case in point of veterinary medicine's continuous evolution forward via lessons learned is the story of "Traveller," one of General Robert E. Lee's horses.

Traveller was noted by many to be Lee's primary horse during battles, and this animal survived the Civil War without incident, only to step on a rusty nail postwar and contract tetanus. Traveller died a few months after Lee in 1871. Two decades later, in 1893, Olaf Schwarzkopf, an Army veterinarian who was between service periods and conducting veterinary research, published his successful findings concerning "The Horse as a producer of Antitoxins," and explained the new process of tetanus antitoxin production.¹⁷

Although post-Civil War veterinarians continued to struggle for recognition, they also continued to provide steadfast patient care on the front lines, even while sustaining their own causalities. One famous patient was Comanche, the horse ridden by Captain Myles Keogh who was killed in the Battle of Little Big Horn on June 25, 1876. Comanche received at least seven gunshot wounds but was saved by Army veterinary surgeon Dr Charles A. Stein.¹⁸

As campaigns against Native Americans subsided in the 1890s, the Army again decreased in size. However, when war was declared against Spain in April 1898, this trend was quickly reversed. An overwhelming number of volunteers, largely from state militias, clambered to join the conflict and swelled the ranks of the military. The large troop numbers, in turn, increased requirements for equines and fueled a frenzied rush to purchase more government animals. Costly problems ensued.

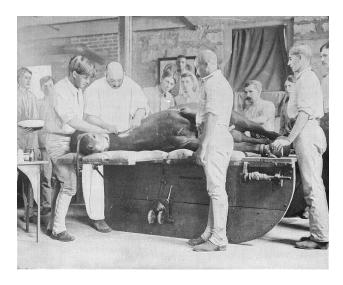


Figure 8-3. A rare and retouched image of a US Army veterinarian performing surgery on a horse circa 1909. The veterinarian (second from the left operating on the horse) is Dr Alexander Plummer, one of the earliest veterinary instructors at the Army's Mounted Service School at Ft Riley, Kansas. The image is found in an early Army manual, *The Army Horse in Accident and Disease: Edition 1909*. Image courtesy of the AMEDD Center of History and Heritage Archival Collection, Ft Sam Houston, Texas.

With a limited number of veterinarians to assist with purchasing oversight, the Quartermaster Department bought many horses without veterinary input. Records indicate that 38,000 horses were purchased at a cost of approximately \$4 million in preparation for the Spanish-American War. Most of these animals were not immediately sent to Cuba but were kept in marshaling areas in Florida; meanwhile, glanders spread. 14(p253)

When veterinarians examined the war horses staged at Tampa, Florida, many of the Quartermaster Department's procured animals were deemed to be unfit and could not be shipped to battle sites. Worried about the spread of disease to nonmilitary equine populations, a Florida court issued an injunction against selling the horses, and other states protested receiving the animals. ^{14(p253)} The large number of unfit equine and military monetary losses gained the national press's attention and resulted in further inquiry.

After this debacle, veterinary officers' recognition and responsibilities expanded. By the early 1900s, veterinarians were able to oversee horseshoers and farriers. Veterinarians were also appointed as instructors at the Army training school for farriers and blacksmiths at Ft Riley, Kansas. Another veterinarian served as an assistant instructor in hippology at the infantry and cavalry school at Ft Leavenworth, Kansas. ^{14(pp200–202)} In garrison, veterinarians instructed junior officers

in hippology. They were also selected to provide age determination and soundness examinations for horses being procured by the purchase boards. In the field, veterinarians accompanied their commands to care for disabled horses (Figure 8-3).

Equine Procurement and Care in the American Military of the 20th and 21st Centuries

World War I

All the military powers engaged in conflict during World War I fielded and employed cavalry units. An estimated 2 million horses were used by cavalry units between 1914 and 1918.⁴ However, World War I was the first war in which large-scale cavalry forces and tactics were not key to securing a decisive military victory. Horses' tactical advantages of speed, maneuverability, and psychological fear were mitigated by technological advances such as improved ammunition ballistics, accuracy of modern battle rifles, and the use of chemical warfare.

An implement as simple as barbed or concertina wire strewn about the ground between opposing trenches effectively removed the threat of a cavalry charge. Wire arranged in this manner caused debilitating injuries to the horses, slowed their progress across the field, and left mounted soldiers exposed to small-arms and artillery fire. These experiences on the Western Front led commanders to hold their cavalry in reserve, using them only in engagements where there was a clear advantage. The Eastern Front presented a better opportunity for cavalry forces to engage with enemy units, but cavalry use was primarily limited to flank security and reconnaissance maneuvers.⁴

The Allied cavalry's greatest success came in the Middle Eastern Theater, where the joint forces of Great Britain, Australia, New Zealand, and India faced the army of the Ottoman Empire.⁴ British Army General Sir Edmund Allenby effectively utilized the Desert Mounted Corps, composed of Australian and New Zealand cavalry (specifically the Australian 4th Light Horse Brigade), to attack the Ottoman defenses in the Battle of Beersheba in modern-day Israel. The horses' mobility and the Australians' aggressive tactics swept the Turks from the field of battle in a mere 38 days.⁴ When all was said and done, the cavalry had traveled 500 miles and captured 80,000 prisoners.⁴

Though the battlefield was changing toward mechanization and away from cavalry charges, the European armies of World War I still relied significantly on horses and mules. However, after years of battle, Europe's horse populations were largely decimated. In countries such as Belgium and in some areas of France,

both military and civilian horses were virtually eliminated, and dogs had to be used as "draft" animals to pull smaller carts. ¹⁹ (See Chapter 2, Military Working Dog History, for more information about how canines supported military efforts before and after World War I.) The United States was largely unaffected by the war, remaining neutral until April 1917. To many Americans, the country's neutrality did not affect its ability to sell goods to the Allied countries. With ample land and farms, horse stock was plentiful, and equines were sold to the Allies in large numbers for use in the war.

The infusion of horses was further assisted by the United States' entrance into World War I and its newly formed Army Veterinary Corps (established June 3, 1916). With over 2,300 veterinarians and 18,000 enlisted personnel serving during the war, the US Army Veterinary Services expanded to care for an army still quite dependent on horse power.¹² It is worth noting that, at the time, horses and mules (and, to a lesser degree, carrier pigeons) were the only official US government animals, and almost all US veterinary animal care was focused on the well-being of these animals. 19 Although cavalry charges were largely outdated by machinegun fire, equine power moved artillery pieces and could still pull supply wagons through areas without improved roads. Logistics relied on horse power in many cases. Single mounts were also used by soldiers performing reconnaissance or patrol duty.

Animals purchased for government service (by the Quartermaster Corps) within the United States were taken to remount depots, which also served as quarantine areas. ^{20(p16)} Serving under the Quartermaster Corps, personnel assigned to the depots furnished new or refreshed horses for divisions before deployment, and veterinarians were assigned to the depots to ensure equine health before the animals were issued to units.

During American involvement in the war, the US Army shipped 68,694 horses and mules to Europe for military use. Losses during shipment due to disease or mishap were low, 660 or around 1% percent. Conce overseas, the US Army acquired more equines from the Allies and from other countries. The total number of equines in use by the American Expeditionary Forces (AEF) is estimated to range between approximately 170,000 to 190,000. Still, there were many shortages: many of the animals may have been recovering from service or were simply unavailable to some units. US Army veterinarians worked to "conserve the fighting strength" of horses and the animals' availability.

As in previous wars, common major health problems for horses serving in World War I continued to be poor nutrition, exhaustion, and disease; however, there are some notable differences between World War I animal healthcare trends and those from previous conflicts. Significant improvements in animal medicine and disease cause and prevention were made since the last major war involving Americans. For example, many of the US veterinary hospitals used during World War I had laboratories that made pathology work possible, animal surgery was practicable at some veterinary hospitals, and the discovery of a mallein reaction test that made glanders detectable potentially saved thousands of horses from being unnecessarily culled.

Unfortunately, new problems were discovered as well. Miserable field and weather conditions intensified parasite infestation, resulting in humans being plagued with lice and equines suffering from sarcoptic mange. Equines also sustained numerous foot ailments and skin problems as a result of the muddy conditions. Poison gas attacks (chemical warfare), artillery bombardments, and rifle fire rounded out the sources of equine injury.

Faced with these numerous dangers, veterinary members of the AEF served at remount stations (depots) and at veterinary hospitals for more in-depth medical care. At the remount stations, horses were given time to recuperate and were examined and separated for possible diseases. If determined to be diseased, the animals were treated or culled as necessary. Animals that were infested with parasitic mange or other skin infections were shorn, thoroughly scrubbed and cleaned, and then walked through a large trench full of a cleansing solution (Figure 8-4).



Figure 8-4. Soldiers of the American Expeditionary Force bathe and scrub a horse at a remount station in France. The cleanings were needed to rid thousands of horses of mange and other skin ailments during World War I.

Photograph courtesy of the AMEDD Center of History and Heritage Archival Collection, Ft Sam Houston, Texas.

Lieutenant John J. Riordan, a veterinarian with the 4th Corps Veterinary Hospital, provides more details about the cleansing or dipping procedures used to treat mange during World War I:

To combat this disease [mange] a large "dipping vat" deep enough to completely immerse the horses and mules was filled with a lime and Sulphur [sic] mixture in the water. The solution was brought to a boil. . . . We "dipped" the horses and mules when the solution was warm, lining up the animals to be treated and driving them through the vat. If the disease was caught early, the treatment was very effective, and the animals recovered. ^{20(p59)}

Other World War I mange treatments included the use of sulfur gas. (see Chapter 1, Military Veterinary Support Before and After 1916, for more in-depth information about animal treatments throughout military veterinary medical history).

Although the remount stations and veterinary hospitals saved many horses, losses sustained during the war were substantial. By December 1918, AEF equine deaths totaled 42,311, and although records are nearly impossible to verify, total equine losses from 1914 to 1918 are thought to be approximately 8 to 9 million animals. 14(p552),23

At the close of the war, military equines faced various fates. Thousands of AEF horses were given or sold to continental Europeans devastated by the 4 years of war. Many animals found unfit for service were butchered for food. Other horses were set to be imported to the United States. To stop publicly and privately owned animas belonging to military forces in Europe from being indiscriminately imported to the United States, the Army Veterinary Corps pushed to have Bulletin No. 33 published on April 19, 1919. 19(p902) The Army Veterinary Corps also coordinated with the US Department of Agriculture, the agency responsible for implementing the quarantine regulations for privately owned mounts returning to the United States, which made the veterinary-championed import restrictions possible. The Army Veterinary Corps' forethought prevented diseases such as mange, foot and mouth disease, and glanders from being brought back from Europe in horses that would have been shipped all over the country (Figure 8-5).

World War II

World War II featured equine support to combat operations in the European and Pacific theaters, but on a much smaller scale than in World War I. Tanks, armored personnel carriers, and mechanized heavy weapons platforms such as half-tracks and tank destroyers were among the technological advancements that greatly



Figure 8-5. Medical personnel of the 137th Ambulance Company put an equine gas mask on a mule. The mule is harnessed and may be pulling a supply wagon or an ambulance. Although there were mechanized vehicles in use during World War I, horse and mule power was consistently used. Photograph courtesy of the AMEDD Center of History and Heritage Archival Collection, Ft Sam Houston, Texas.

improved armies' mobility and lethality and reduced dependence on horses. Armored corps' battlefield employment, infantry support, tactics, and techniques doctrine were built on lessons learned from World War I and the Spanish Civil War, among other engagements.²⁴

Surprisingly, despite these advancements, many European nations maintained a modest number of equine cavalry units, including the French, Austrians, Bulgarians, Poles, Lithuanians, Romanians, and Czechs. ^{25,26,27} The famed German "blitzkrieg," or "lightning war," still depended on horses in some cases to pull artillery and to move supplies. However, the British almost entirely replaced their cavalry units by 1939. ^{25,28}

Major changes to US Army horse use occurred in the 1930s. Although there were 15 active horse cavalry regiments in the Army after World War I, by 1937, two of the regiments were converted to mechanized units. ^{29(p79)} The pattern continued in the following years, and for the first time in American military history, horses were not a significant part of the force. The Louisiana Maneuvers, an enormous series of war exercises in 1940 and 1941 used to evaluate US Army tactical doctrine and the mobility of forces, relied partially on horses, as well. ^{29(p354)} After the maneuvers, the horse-borne units were converted primarily to mechanized units.

Despite these technological conversions, there was still a need to ensure military equine health. Army veterinarians provided horse and mule health and care instruction to more than 4,400 cavalry officers and 1,041

enlisted personnel, as well as to field artillery school personnel on a similarly extensive scope, and supplied training to almost 1,500 enlisted horseshoers. ^{12(p111)} During World War II, the Army Veterinary Service provided over 2 million hospital treatment days for Army horses and mules and implemented evacuation plans in overseas theaters with 72 veterinary detachments, companies, hospitals, and provisional organizations. The Zone of the Interior alone had a stall capacity of 2,500 for disabled animals.

The average yearly equine strength during the war was over 44,000 animals. ^{12(p519)} The peak year of equine strength for the US Army was 1943, with 56,287 animals. ^{12(p519)} An estimated 60,000 horses and mules were purchased in the Zone of the Interior, and another 6,000 horses were purchased from Australia. ^{12(p489)} The numbers of equines purchased for military service in other theaters of the war (as remote as Tibet) are not known but likely added several thousand to the total (Figure 8-6).

As was the case during World War I, there was a substantial need to maintain a supply of horses and mules to Allied countries, and thousands of US animals were shipped overseas. These animals had to pass inspection by US Army veterinary personnel working alongside transportation and Quartermaster Corps personnel at depots.

Initially, the US Army operated four remount facilities in the United States and a number more in the Pacific and European theaters. However, the total number of horses produced or procured dwindled as



Figure 8-6. Veterinarians were very much a part of the inspection and procurement process during World War II. In this image, veterinarians are inspecting ponies in Tibet to be purchased for use in the China-Burma-India Theater. Reproduced from an unnamed slide collection courtesy of the AMEDD Center of History and Heritage Archival Collection, Ft Sam Houston, Texas.

the war went on. The last US Army remount station was transferred to the US Department of Agriculture in 1948. ^{30,31} Approximately 50 Veterinary Corps officers who fell under the control of The Surgeon General's Office were involved with the professional and technical supervision of procuring and processing remount animals for the Army Remount Service, which fell under the control of the Quartermaster General.

China-Burma-India. Although equines were used to a smaller degree overall in many areas during World War II, the largest numbers attached to American forces were found in the Mediterranean Theater (see the next section) and the China-Burma-India (CBI) Theater. The terrain in these locations—mountains and jungles without improved roads—prevented the passage of even jeeps, making mule or horse use necessary. In addition to other tasks, US Veterinary Services inspected, cared for, and supervised animal loading and shipping at the ports of embarkation, as well as cared for the animals while in transit.

An early test in New Guinea in May of 1943 explored mass air transportation of equines. ^{12(pp553-554)} Army veterinarians were available to assist with possible animal health issues and securing the animals. After the tests were considered successful, pack animals were transported by air to move them more quickly further into Burma and then over the Himalayan Mountains into China. Three major US airlifts transported a total of over 7,000 horses and mules in the CBI theater of operations. ^{12(p553)} The animals were largely used by Chinese forces. US Army veterinary personnel oversaw the loading of the animals as well as of their required food and equipment.

In August 1943, the War Department created a volunteer force designated as the 5307th Composite Unit (Provisional) for the specific purpose of engaging Japanese forces deep within CBI's jungles and rugged terrains. Nearly 3,000 men were committed to the unit, later known as "Merrill's Marauders," and were supported by an animal transport company that consisted of nearly 300 pack mules brought from the United States by transport ships. The pack company was supplemented with replacement horses from New Caledonia. The mules and horses were used to haul light and heavy equipment alike, including ammunition, rations, artillery, and mortars, through dense jungle and inhospitable terrain.

The animals suffered equally as the men but played a vital role in moving supplies and materiel, enabling the infantry to reserve their strength to engage and fight large Japanese elements. For nearly 750 miles, the mules marched with the unit, fighting all along the way in a multitude of engagements. Ultimately, combat operations lasted for nearly half a year and



Figure 8-7. Mules and soldiers of Merrill's Marauders travel on the Ledo road in Burma.

Reproduced from a Department of the Army photograph found in "India-Burma: The US Army Campaigns of World War II," Center of Military History Publication 72-5.

culminated in the capture of the town of Myitkyina and its strategically located airfield. Because of massive casualties from combat and disease, the few remaining officers and enlisted soldiers were reassigned to the 475th Infantry Regiment, and the 5307th was disbanded roughly a year after its creation. The mules that survived were left with Chinese, Burmese, and Indian allies for further use (Figure 8-7).³²

A follow-on unit was created to continue the war in the CBI Theater. The new unit was larger and sought to provide not only more troops, but also a better capability for caring for human and animal casualties. The MARS Task Force, or 5332d Brigade (Provisional), consisted of the 475th Infantry Regiment, the 124th Cavalry Regiment, two field artillery battalions, three portable surgical hospital units, six Quartermaster Pack Troops, and the 18th Veterinary Evacuation Hospital.³³ Each of the infantry, cavalry, and artillery units in the task force had 280 to 330 mules. 33 The animals were also needed in a support role because horses and mules moved the 42nd, 44th, and 49th portable surgical hospitals attached to the task force.³³ The total for all equines in the provisional brigade, including animals under Chinese Army control, was 2,960.³³

Because of the workload and their importance in logistics and maneuvers, these military equines received veterinary medical care that mirrored human evacua-

tion and treatment plans. The 18th Veterinary Evacuation Hospital was commanded by Lieutenant Colonel Elmer W. Young (later, Brigadier General Young, 11th Chief of the Veterinary Corps, 1954–1959). Paralleling a military medical collecting company of the time, which transported ill or wounded service members to human hospitals to receive necessary care, the 7th Veterinary Company (Separate), attached to the 18th, moved ill or wounded animals from the front lines to the veterinary evacuation hospital for more in-depth treatment.33 While air-dropped medical supplies were (and still are) marked with red crosses for human use, veterinary supplies were (and still are) marked with green crosses (see Chapter 1, Military Veterinary Support Before and After 1916, for more information about the use of the green cross.). 33 Given the improved animal care and the availability of trained equine personnel, losses due to exhaustion and disease were considerably fewer than with the previous provisional unit.

Europe. Although many people are familiar with the frequent use of equines in World War II in the CBI Theater, horses and mules were used on a much larger scale, albeit less well known, in the European Theater. Just as the pack animals supported soldiers in the CBI Theater, mules were relied upon to carry artillery and supplies up mountain trails in the many inaccessible areas of the Italian Campaign.

However, equine use began slowly. The 3d Infantry Division used burros in a portion of the North African Campaign and in the invasion of Sicily in 1943. ^{12(p575)} During the invasion month of July, the animals did not fare well, suffering not only from battle casualties, but also from heat and exhaustion. All the unit's 60 animals died by the month's end. ^{12(p575)} To continue operations in Sicily, horses and mules were procured locally, but again, losses were high. Of the 487 mules and 219 horses acquired, 43% were killed in action. ^{12(p575)}

After landing on the Italian Peninsula, Allied forces' use of animals accelerated; in late 1943 and early 1944, the Fifth Army's animal strength was considerable and growing. The 3d, 34th, 36th, and 45th Infantry Divisions used 1,078 mules and horses for artillery battalions and pack trains. ^{12(pp575,582)} Another 1,835 animals were acquired from Italian Army mule pack trains. ^{12(p582)} A part of the Fifth Army included the French Expeditionary Corps, which comprised 4,300 animals, later growing to 9,000 for the southern invasion of France. ^{12(p582)} The mean animal strength of the Fifth Army from December 1943 through June 1945 averaged 5,150 mules and horses. ^{12(p582)}

After Italian forces separated from their German allies in September 1943, Italian Army mule trains were allotted for American Fifth Army and British Eighth Army use as well as by Italian veterinary units. 12(p582)

Italian Army veterinarians assisted in the collection, treatment, and operation of remount stations for the American and British troops within the area. ^{12(p582)} With the large number of animals, care and evacuation became issues and, in addition to veterinarians assigned to the previously mentioned divisions, more veterinary personnel were needed.

An evacuation plan for the Fifth Army's animals was developed that included two separate veterinary companies, a veterinary company from the 10th Mountain Division, two evacuation detachments, and at least nine veterinary hospital organizations, and a complete remount operation. ^{12(p582)} Italian veterinarians were to be part of the plan, with supervision provided by Allied veterinary personnel. The plan was massive and was pared down and altered based on available veterinary assets (Figure 8-8).

Two Italian veterinary evacuation hospitals, the 110th and 130th, were established at Treponti and Nocelleto, respectively. ^{12(p584)} A third hospital unit, the 17th US Army Veterinary Evacuation Hospital, was deployed from the Zone of the Interior to Teano, Italy. ^{12(p584)} Remount stations were established at Persano, Santa Maria, and Bagnoli. ^{12(p584)} As the Allied forces advanced, the stations continued to provide dispensary care. The French Army briefly provided support to the remount stations with the 541st Ambulance Company, as did a provisionally formed US Army veterinary hospital, but, later, both units were shifted in preparation for the invasion of southern France. ^{12(p584)}

As the fighting progressed past mountainous areas, equine use was again largely discontinued. Many of the animals reverted back to Italian control; consequently, veterinary support was in less demand. Some equines were used for the initial push into German-held northern Europe, but they were not a significant portion of the force. Veterinary support to these units was largely attached to the 601st and 602nd Field Artillery Battalions. ^{12(pp590-591)}

The number of official US Army horses and mules that died from all causes, including destruction (euthanasia) due to disease or age, during the war (1941–1945) totaled 12,916. ^{12(p533)} The number is a large reduction from previous conflicts and demonstrates a lower reliance on animal power in general during World War II, but the number of losses may not include the many locally procured animals.

Special operation's connections during World War II foreshadowed future equine use in unconventional warfare. The current 75th Ranger Regiment traces portions of its origins to the 5307th Composite Unit and its 475th Infantry Regiment.³⁴ Similarly, the 6th Ranger Battalion, which freed hundreds of prisoners behind



Figure 8-8. Mules are unloaded from their "ambulance" to further veterinary care by soldiers of the 45th Infantry Division in Italy. The reliance upon horses and mules necessitated a large veterinary care system.

Photograph courtesy of the AMEDD Center of History and Heritage Archival Collection, Ft Sam Houston, Texas.

enemy lines in a raid on a Cabanatuan prisoner of war camp in the Philippines, was formerly a mule-borne artillery unit. Originally designated as the 98th Field Artillery Pack Battalion, the unit participated in the 1943 test to transport mules by airplane (ie, the test mentioned earlier in this chapter). ^{12(p533)}

Equines were also used in unconventional warfare that occurred directly after World War II, when civil war erupted in Greece. Although the conflict officially lasted from 1946 to 1949, guerrilla raids continued for some time afterward. Greece's forces and communist groups vied for control in the turmoil left after German occupation. US support for the anticommunist forces included 4,000 mules and their pack equipment, purchased in the United States and transported to Greece. While some of the American advisors were experienced in pack techniques, further support and animal treatment was provided by US Army veterinarians.

Serving as a part of the Joint US Military Aid Group, Greece, American veterinarians served from 1947 through 1955. One of these veterinarians was Lieutenant Colonel Charles V.L. Elia (later, Brigadier General Elia and future Chief of the Veterinary Corps, 1972–1976). When US forces stationed in Greece were placed under Air Force control, the Army veterinarians were replaced by Air Force veterinarians. The use of mules in the counterinsurgency, versus motorized transport, furthered the military's debate over continued equine use in later years.

Korean War. Large-scale fielding and use of equines for battle had concluded by 1945, with western major military powers principally committing themselves to motorized heavy weapons platforms and transportation.

Improvements in helicopters and their ability to reach previously inaccessible areas also curbed animal transportation. With the outbreak of the Korean War in 1950, "military animal" seemed to be an antiquated term.

The 1st Cavalry Division acquired a few local horses in Korea, but they were not used for long or for large-scale operations. Horses were also purchased, borrowed, or adopted by other American units in Korea, though not much is known about the use or terms of service of these animals. However, the story of one horse that saw considerable combat was extensively recorded.

This horse came to be known as "Reckless," and her story is now a Marine legend. After a rifle platoon belonging to the 5th Marine Division discovered that the Korean terrain and requirements unique to their unit were suited for a horse, the rifle platoon commander purchased a diminutive sorrel mare at a racetrack in Seoul for \$250 in 1952. This platoon used the mare for draft power, moving heavy, recoilless rifles and ammunition between the ammunition supply point and their frontline fighting position. First named "Flame of the Morning," the horse was renamed "Reckless." 39(p84) The Marines throughout the company, battalion, and soon the division quickly became fond of the mare and selflessly shared their bunks, beans, and beer with her. Because she was so well liked and had proved herself valuable to their mission, the Marines bestowed her with the rank of sergeant.

Sergeant Reckless' position as unofficial mascot came second to her primary role as a draft animal. The Marines of her platoon patiently worked with the mare, teaching her to lie down or find adequate cover from both direct and indirect fire. She learned these tasks quite well, first without and then carrying the 115-pound, 7-foot rifle and the six to ten accompanying 24-pound rounds. ⁴⁰ Once the platoon commander felt she was adequately trained and prepared, Reckless was pressed into service.

The platoon relied on her in several large-scale engagements. She was reported to have remained calm but alert while under fire, reliably delivering supplies and ammunition. The mare frequently traversed unaccompanied between the ammunition supply point and the front line. She remained steadfastly loyal to her fellow Marines and never broke from battle. She was injured twice, receiving shrapnel wounds to her flank and the skin above her left eye.

When the war ended in 1953, Reckless' fate was in question. Through the efforts of her fellow Marines and private citizens, Reckless was brought to the United States in 1954. The stories of her battlefield valor were widely reported in popular media of the time. Reckless was stabled at Camp Pendleton, California, later promoted to staff sergeant (SSGT), and

awarded two Purple Hearts and a Presidential Unit Citation prior to retirement in 1960. She was the guest of honor at several Marine Corps birthday functions and ate her share of birthday cake every November 10th. The courageous sorrel mare passed from life on May 13, 1968, and was buried with full military honors at Camp Pendleton.⁴⁰

Vietnam War. By the mid-1950s, the US Army had extremely few equine units. The majority were ceremonial units, and a few were quartermaster pack units. One of the last refuges for actual working horse and mule units was at Ft Carson, Colorado, until the 4th Field Artillery Battalion (Pack) and 35th Quartermaster (Pack) Company were inactivated, and the animals were sold at public auction in February 1957. ^{39(p85),41}

Veterinary support for equines had continually declined since the end of World War II, but these specialized veterinary skills were not totally discarded. As the US military adjusted to counter smaller conflicts that were part of the larger Cold War and US involvement in Vietnam, military planners suggested increased equine use, and during the early to mid-1960s, there was considerable debate over this issue. Studies from the equine debate had listed horse use in Thailand and by North Vietnamese forces as possible reasons for US equine procurement in Vietnam. ^{38(p26)} (Ultimately, US equine use during the Vietnam War did occur but was extremely limited.)

Finally, it was decided that there would not be an active horse procurement program within the continental United States as there had been in America's recent past. Horses and mules, and other draft-type animals needed by the US Army (eg, camels and elephants) would be locally procured when the need arose. However, instruction to utilize and care for these animals would still be needed. In the Army, Special Forces soldiers would receive equine pack training because they were the soldiers most likely to work with indigenous forces in developing countries (they were already being deployed to Southeast Asia).

A few soldiers in the Army still possessed the necessary skills to correctly load pack animals and also to purchase the right animal for the job, but these individuals were mostly attached to ceremonial horse units, with a few exceptions. Most did not have a related military occupational specialty such as the veterinary specialist (MOS 084), which indicated an ability to shoe horses and mules, so it was hard to identify those soldiers who had this skill set. 42(p64)

The United States Marine Corps (USMC), with recollections of SSGT Reckless's deeds still fresh, as well as some historic studies from their use of local mounts during the occupations of Haiti and Nicaragua in the early 1930s, incorporated "The Employment of Pack



Figure 8-9. An Army veterinarian demonstrates basic horse care and treatments to a group of Special Forces soldiers. Reproduced from an unnamed slide collection courtesy of the AMEDD Center of History and Heritage Archival Collection, Ft Sam Houston, Texas.

Animals" into USMC Basic School. ^{39(p84)} The courses' lesson plan dates to at least 1961. ^{42(p66)} Special Forces veterinary personnel attended the course and returned to Ft Bragg to incorporate it into "pre-mission" training. ^{43(p76)} Interestingly, the instructors for the USMC course consisted of an Army detachment with "one veterinarian, one lieutenant, and one instructor-horseshoer (E-7)." ^{42(p66)} Although the Marines had the only official equine packing school, the animal care instructors were from the Army (Figure 8-9).

Arrangements for training and using equine forces changed in the decades following the 1960s, but there were some relative constants. Use remained low, and other than animals in ceremonial units, equines were likely connected to a Marine or Special Forces operator.

Operation Enduring Freedom. One of America's darkest hours occurred on September 11, 2001. The country's citizens and service members alike watched helplessly as more than 3,000 noncombatants died in coordinated terrorist strikes in New York, Virginia, and Pennsylvania. In the days and weeks that followed, military planners worked around the clock to draft a definitive response to Al Qaeda terrorists and their Taliban sponsors. However, Afghanistan was largely underdeveloped in terms of intelligence assets and allies, and there was a paucity of information regarding the leaders of both organizations.

Moreover, what industrial and military infrastructure that remained intact following the Soviet invasion and occupation of the 1980s did not present a targetrich environment wherein an aerial bombing campaign would effectively pave the way for a ground invasion. Throughout history, Afghanistan's advantages against invaders were its rugged, unforgiving terrain and indigenous fighters' familiarity with and use of that terrain. America had few prudent options available to project forces into Afghanistan. The most immediate and best option available was to turn to the specialists in unconventional warfare. A handful of US Army Special Forces operators could assess the situation on the ground, develop military alliances with friendly indigenous forces, gather and prioritize useful intelligence, and direct attacks against the Taliban and Al Qaeda.

Several operational detachments alpha (ODAs) from the 5th Special Forces Group were surreptitiously inserted into Afghanistan beginning in October 2001.44 Each ODA consisted of 12 men and was given specific Afghan counterparts with whom they imbedded themselves. Several of the ODAs were met at their drop sites by their assigned Afghan partners and cavalry detachments. Many of the Afghan horses were small and thin, appearing more like ponies than true horses; however, they were tough and sure-footed, which served them well on the harsh steppes and in the unforgiving mountains. Local donkeys were similarly used as pack animals. Together, the Americans, the Afghans, and their mounts maneuvered through hostile territory. Many of the operators lacked experience of any kind in a saddle: despite this, they quickly adapted and performed well.

The ODAs used the horses to quietly move into positions whereby they could direct airstrikes onto Taliban fighting positions. The Afghans of the Northern Alliance began to grow confident with each bomb delivered against the enemy. Together, the ODAs and Afghans developed a successful strategy of coordinated airstrikes followed by a cavalry charge and infantry assault. The Afghan cavalry charge was much like that from World War I in which the cavalry would race ahead to the enemy line, dismount, and deliver effective small-arms fire to enemy lines. The well-coordinated attacks produced a psychological fear in the enemy, causing many of the Taliban to retreat or surrender to the Northern Alliance.⁴⁴

CURRENT MILITARY USE OF EQUINES

In today's military, horses play several important ongoing roles. They prepare soldiers for combat operations, support public relations and recruiting efforts, preserve cavalry traditions and tactics, and help protect and restore human health. Today's military equine units are not legacy units but have been created or reformed for one of two basic missions: (1) they have been created to serve a vital training purpose or (2) they have been reformed because of a desire to preserve the history and dignity that horses share with the US military or to provide support to human well-being.

Equine Units Maintained for Training

The USMC's Mountain Warfare Training Center, located in in the mountains of northern California, is home to about 50 horses and mules. Training center personnel prepare military forces to use equines in current operational settings and develop service members' proficiency in employing horses and mules to transport personnel and supplies in rugged terrain. US Army veterinarians participate in the instruction at the center, providing training for safe animal handling, evaluation and selection of animals for purchase, and basic equine first aid and emergency management.

Equine Units Reformed to Preserve History and Dignity

Nationwide, cavalry, caisson, and mounted color guard units employ over 300 equines that serve the important mission of preserving military tradition, tactics, and heritage. Many of these units perform publicly in venues across the country in support of military recruitment efforts and serve as ambassadors of good will to the American public. The units in existence today have not served continuously with an equine component; rather, that component has been reestablished.

These units are staffed by a variety of people, including assigned active duty personnel and volunteer organizations. Personnel serving in these units commit themselves to the welfare of their mounts as well as to preservation of their traditions and perfection of their performance. Frequently, units employ one or more permanent civilians as trainers to provide long-term continuity. They may have an organic veterinary technician or may assign an equestrian member as veterinary liaison to coordinate the team's medical information and treatment.

The specific compositions of, and missions completed by, these reformed units varies by the installations they are assigned to; for example, each morning, two teams of horses in Arlington, Virginia, deliver an American service member to his or her final resting place. The 3rd Infantry Division "Old Guard" Caisson Platoon ensures the military burial honors at Arlington National Cemetery are meticulously carried out, day in and day out. This platoon maintains two teams of matched horses: a black team consisting of Percheron

draft horses and a gray team consisting of Lipizzaner horses. Each team works as a six-horse hitch, pulling a black artillery caisson (minus the cannon) bearing the casket of the deceased. Similarly, at Ft Sam Houston National Cemetery, a matching team of black Percheron horses pulls the black caisson, adding honor and dignity to official military funerals.

Although most caisson horses have already received training prior to purchase by the government, caisson duty requires extensive specific training and preparation for the animals and riders to present the most dignified appearance in the solemn funeral procession. The job of the caisson horse is both mentally and physically demanding. Horses must be quiet in harness, tolerant of spectators and vehicular traffic, and able to work together as a team, and they must not be prone to panic. Additionally, the horses must be physically fit, with excellent conformation to pull the heavy World War I-era wagons. Meticulous attention is given to the selection and health maintenance of these valuable animals to ensure their longevity. 45,46

The "Half Section" from Ft Sill, Oklahoma, also known as the "Flying Artillery," represents the only remaining horse-drawn field artillery section in the US Army. (Horse-drawn artillery became obsolete with the advancements of mechanized weapons between World War I and World War II.) Currently, the field artillery maintains one horse-drawn artillery unit for ceremonial purposes. A small group of color- and sizematched geldings furnish the six-horse hitched team to pull an authentic gun wagon, complete with cannon. The team is known as the "Half-Section" because it consists of the gun wagon only and is not accompanied by the munitions wagon. The Half-Section supports military ceremonies, including changes of command, funerals, retirements, reveille, and retreat, and also participates in many other events within Oklahoma and the surrounding states, including parades, rodeos, and demonstrations. The six-horse team is capable of pulling the heavy gun wagon at a full gallop, demonstrating the operational flexibility of the historic horse-drawn artillery and thrilling crowds of spectators (Figure 8-10).^{47,48}

Several installations, including Ft Hood, Ft Riley, Ft Carson, Ft Irwin, and Ft Huachuca, maintain mounted cavalry and mounted color guards. ^{49,50,51,52} These units proudly perform at official military ceremonies, including changes of command, retirements, and commemorative events, in addition to carrying out hundreds of community performances annually in support of national and regional events. These units' missions include representing the history of the US Army and cavalry, aiding in recruiting efforts, and fostering a sense of pride and esprit de corps within their communities.



Figure 8-10. Current use of ceremonial horses in the Army, the Ft Sill Artillery "Half Section." This image shows the section in action during the Tournament of Roses Parade at Pasadena, California, on January 1, 2016.

Reproduced from the Ft Sill Public Affairs website. https://www.flickr.com/photos/fortsillcannoneer/albums/72157663021794919. Accessed January 19, 2016.

The units strive to maintain as much historic accuracy as possible, using period saddles, weapons, and uniforms and accurately depicting cavalry maneuvers that were employed on the historic battlefield. A crowd favorite at change-of-command ceremonies is the traditional cavalry charge, complete with pistol firing and saber drawing, to demonstrate the intimidation imposed on the enemy by the cavalry forces.

The same horses that perform these feats of speed and skill must also perform calmly and safely in parades through the nation's cities and with quiet dignity as the color guard in a wide variety of venues. Cavalry and color guard horses must possess an exceptionally calm and willing temperament as well as excellent conformation to withstand the mental and physical rigors of their daily tasks. Similar to those of the caissons and Half-Section, cavalry and color guard horses are purchased with their basic training already accomplished and go on to receive extensive specific training once they join the unit. These performance horses are highly valued by their units and may serve 20 years or more.

Equine Units Reformed to Support Human Well-Being

Caisson, cavalry, and color guard horses also make ideal mounts for equine-assisted therapy or "hippotherapy" because of their size, strength, and extensive training in maintaining composure in novel situations. Hippotherapy is a popular treatment modality that helps disabled children and adults improve strength and mobility through exercising the core muscles used in riding. The freedom of movement offered by a horse also provides substantial psychological benefits to many patients. Several military horse units actively participate in hippotherapy programs within their communities, often helping with the recovery of the human warriors with whom they serve. (See Chapter 6, Human-Animal Bond Programs, for more information about hippotherapy and other animal treatment programs that support human healing and morale.)

In certain locations, Morale, Welfare, and Recreation (MWR) horses are also used to support hippotherapy programs or to offer a healthful benefit to service members and their families: the opportunity to enjoy horses without the challenges of owning a horse while being a highly mobile military or military family member. Numerous MWR programs use nonappropriated funds to purchase horses that are available for rental or riding lessons for many styles and levels of riding on a short- or long-term basis; MWR activities also frequently sponsor equine recreational events on many installations. The horses purchased by MWR are typically already trained prior to purchase and are chosen for their ability to be safely handled and rode by potentially inexperienced riders.

ROLE OF VETERINARY OFFICERS IN MILITARY EQUINE HEALTH

As already noted in this chapter, Army veterinarians play a critical role in selecting equines for military use; horses selected for purchase must be of good temperament and sound, mandated conformation. For example, each cavalry and caisson unit has strict requirements for uniformity of size and color, in keeping with their historic traditions and to present the most pleasing appearance. In accordance with Army regulation, veterinarians conduct a thorough physical

examination of each animal considered for purchase.⁵³ This examination is generally conducted after the military horse unit has evaluated the animal for the appropriate level of training and conformity to standards of color, size, breed, and gender, as established within their statement of work.

The veterinary examination consists of a thorough inspection of all body systems, first looking for any signs of infectious disease, then paying particular attention to the cardiovascular, neurologic, and musculoskeletal systems to ensure the animal will be structurally sound for the intended purpose. In addition, the veterinarian must determine the approximate age of the horse by dental examination. Animals frequently have scars from old injuries that must be evaluated to determine whether they will limit future use. Animals are also observed carefully for behavioral characteristics that might be incompatible with their intended use (eg, pulling back when tied; biting, striking, or kicking when handled; shyness around the head; or hyperreactivity to sudden movements or noises). Any of these behavioral flaws could result in serious injury to handlers and would interfere with the use of the animal in a public setting.

Veterinarians also play a crucial role in the longterm preventive care of military equines. Barring accidents or bad luck, horses can easily live into their thirties and can often perform the level of work demanded by cavalry or caisson duty into their late twenties if they are well cared for and regularly exercised. Preventive military equine healthcare, which is designed to keep animals in top performance condition throughout their lives, includes the following: regular physical examinations to identify potential problems early; routine dental examinations, reduction of excessive enamel points, and early intervention for dental abnormalities; annual testing for equine infectious anemia virus; regular vaccination against common and devastating diseases; and strategic deworming to control intestinal parasites.

In addition to the preventive care listed above, military equines are routinely vaccinated against tetanus, rabies, Eastern and Western equine encephalitis, West Nile virus, equine influenza, and equine herpesvirus and may be additionally vaccinated against other diseases at the discretion of the supporting veterinarian. Strategic deworming, applied to military equine populations, is a herd health strategy designed to minimize selection pressure on parasites to develop resistance, minimizing pasture contamination and maximizing the animals' health.

Daily horse care, including grooming, feeding, manure removal, and grounds maintenance, is also essential to maintaining healthy animals. Veterinarians provide training to horse handlers on proper grooming and handling as needed. They also evaluate feeding practices and make recommendations on the type and quality of feeds to be used to optimize the performance potential of each animal. Veterinarians inspect stable and pasture facilities regularly to ensure manure is removed to minimize parasite infestation and nuisance flies. They also inspect the grounds for hazards that could result in illness or injury, including damaged fences, structures, metal hazards, toxic plants, and standing water. Quarterly inspection reports are provided to the responsible commander and maintained on file at the veterinary office.⁵³

Military equines used for ceremonial purposes may spend several weeks per year on the road attending events. Military veterinarians inspect the animals prior to travel to ensure they are healthy and to issue the certificates required for interstate travel. To ensure animals will not be inadvertently exposed to an active infectious disease situation, veterinarians must be aware of existing disease situations within the horses' state of origin and also within each state through which the animals will pass. Occasionally, travel routes must be varied to avoid areas with active quarantines. Care en route is also important, and military veterinarians must work with unit commanders to identify the appropriate veterinary care facilities along the route in case of emergency. These care providers are routinely contacted by the supporting veterinary officer prior to the trip to ensure their availability and determine the best contact method in an emergency.

At the end of their active service life, military horses are typically retired and made available for purchase or adoption. When the horse is no longer able to comfortably perform its military duties, the supporting veterinarian provides a medical disposition letter to the horse unit commander, detailing the reasons for the medical disposition, ongoing medications required by the animal, and prognosis (if known) for use as a riding or pet animal. This serves the dual purpose of informing the commander of the need to retire the animal and notifying the potential adopters of the animal's ongoing medical needs and future use potential.

SUMMARY

The US Army Veterinary Corps was established by an Act of Congress on June 3, 1916, though, as veterinary equine history reveals, veterinarians have cared for US Army horses for over 200 years—in peace and in war—on and off divergent, ever-changing battlefields. Army veterinarians continue to care for equines across

the globe, from the comfortable and secure caisson stables and the MWR-sponsored equine activities in America to the battlefields of Afghanistan and the stability operations in Central and South America and Asia. Equipment, medicine, and supplies are sometimes sparse in certain irregular operations locales,

but Army Veterinary Corps officers educate owners, manage herd healthcare, and treat individual horses with as much expertise and professionalism as their predecessors have since 1776.

US Army veterinarians have played a crucial role in the acquisition of healthy, suitable equines for military service for over 100 years and continue to play an ongoing role in maintaining the health and welfare of military-owned animals. Education provided by military veterinarians to these animals' handlers minimizes the risk of disease and injury while improving their quality of life. Veterinary care for sick and injured equines helps them recover faster and retain their function within their unit, conserving funds and unit integrity.

The reliance on horses for use in military operations has waned in importance over time. Still, it is profoundly ironic that, in Afghanistan, the US military, the most technologically advanced military superpower in recorded history, has found itself relying once again on the horse, a creature who served the dominating armies of Alexander the Great in the same country centuries earlier. Together, the US Special Forces operators and their Afghan Northern Alliance allies were the first to employ cavalry charges in the 21st century, proving that the equines' unique qualities can make them assets for imaginative military leaders when the correct situation and circumstance present themselves. Even as modern warfare continues to evolve, the horse will continue to have some sort of role in future campaigns.

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