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**The Horse Disease in Kansas,  
1912-1913**

**by**

**Richard F. Raugewitz**

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*The Emporia State Research Studies*

KANSAS STATE TEACHERS COLLEGE  
EMPORIA, KANSAS 66801

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# The Horse Disease in Kansas, 1912-1913

by

Richard F. Raugewitz \*

## I. THE APPEARANCE OF THE DISEASE AND THE CONCERN IT PRESENTED

A pattern of despair was observed in Kansas during the fall of 1912 and the spring of 1913. A strange and mysterious disease prevailed among horses living on the Great Plains. It started in western Kansas and worked its way eastward. It reached into surrounding states, but Kansas was the hardest hit. The malady reached far and wide throughout the state and was commonly referred to as the "horse plague."

The census of 1910 showed the horse and mule population nearly equal to the human population. There were 966,747 horses and 189,969 mules in the state.<sup>1</sup> The human population living in Kansas was 1,696,361.<sup>2</sup> Tractors were few in number and thus the disease was of grave concern to the people of Kansas.

The disease was strange and mysterious because, despite general symptoms, the experts came up with different names, causes and treatments for it. The symptoms generally followed those described by Dr. George C. Prichard, veterinarian in Shawnee County:

. . . the animal would stand in one position for sometime and when approached would be noticed to have a peculiar action in the gait; when walking a slight staggering of the hind legs. The animal is not inclined to move unless forced to do so. In a very short time in an aggravated case the cerebral symptoms become well marked, the animal has a peculiar, listless, dull and expressionless appearance and has a tendency to walk in a circle — either to the right or left. After the cerebral symptoms are well marked the

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\* Mr. Raugewitz is a member of the Social Sciences faculty at Wellsville, Kansas, High School. This study originated as a Master's degree Project under the direction of Professor Walter W. Butcher. The writer also wishes to acknowledge the helpful assistance of Robert W. Richmond, State Archivist, Kansas State Historical Society, Topeka.

<sup>1</sup> *Seventeenth Biennial Report of the Kansas State Board of Agriculture*, Vol. XXII (Topeka: Kansas Department of Agriculture, 1911), p. 1048.

<sup>2</sup> *Ibid.*, p. 1001.

horse shows difficulty in drinking water -- due to paralysis of the muscles used in swallowing. . . .<sup>3</sup>

Federal experts declared the deaths were due to forage poisoning, which they blamed on the drought.<sup>4</sup> On the other hand, in a report submitted by the Veterinary Department, Kansas State Agriculture College, the disease was called cerebro-spinal meningitis which was caused by the germ diplo-coccus and corresponded very much in certain characteristics to the germ producing cerebro-spinal meningitis in man.<sup>5</sup> Yet, Dr. A. Sophian, a New York expert in spinal meningitis in the human, said the disease was more like infantile paralysis rather than spinal meningitis, but he could not arrive at a definite conclusion.<sup>6</sup>

The State Veterinary Board pronounced it as "strongalus armatus." This disease was caused by a small worm commonly known as the palisade worm which, in its larval form, passed out of its home in the intestines and entered other tissue of the body. It then tended to produce symptoms similar to that of spinal meningitis in man with high temperature, low pulse rate and abnormal pressure on the brain and spinal cord.<sup>7</sup> A United States government bulletin published by the Department of Agriculture maintained it was a germ new to the bacteriologists and was temporarily classified as a germ of the pasteurilla group.<sup>8</sup>

Newspapers picked up each discoverable bit of information and reported it to the people. A quick look at front page headlines of *The Dodge City Daily Globe* shows the indecision which prevailed. The following headlines are examples: On August 22, 1912, "There Is An Epidemic of Influenza. . . ."; September 3, "Now They Says Its The Palisade Worm"; September 7, "Federal Expert Is Puzzled Too"; September 14, "Its Spinal Meningitis and Veterinarians Have No Remedy."

The diagnoses were not based on spur-of-the-moment guesses. Much study had already gone into the disease by the federal government. State Veterinary Board, Kansas State Agriculture College, and private veterinarians. Laboratories were established at Hoxie, Kansas City, and Ness City in an attempt to find the cause and cure for the disease. The laboratory at Hoxie was headed by Dr. T. H. Haslam and Dr. J.

<sup>3</sup> *Clippings File* (Kansas State Historical Society Library, Topeka), *Infectious Diseases of Domestic Animals*, Unidentified Paper, Without Date, p. 27. Hereafter referred to as *Clippings*, KSHS.

<sup>4</sup> *The Topeka Capital*, September 2, 1912, p. 1.

<sup>5</sup> *The Papers of Governor Walter R. Stubbs, 1909 - 1919*, (Subject File: Horse Plague) August 12 - September 7, 1912 (Archives Division, Kansas State Historical Society, Topeka). Report From Veterinary Department, Kansas State Agriculture College, August 31, 1912. Hereafter referred to as *Stubbs Papers*.

<sup>6</sup> *Clippings*, KSHS, *The Topeka Capital*, Without Date, p. 8a.

<sup>7</sup> *The Topeka Capital*, September 3, 1912, p. 2.

<sup>8</sup> *Clippings*, KSHS, Unidentified Paper, September 17, 1912, p. 44.

G. Jackley, bacteriologists from the Kansas State Agriculture College. The laboratory at Kansas City was headed by Dr. A. Sophian. By September 12 the laboratory at Hoxie was experimenting with over 2,000 horses.<sup>9</sup>

Although basically the purpose of the experiment stations was to find the cause and cure for the disease affecting the horses, they were also interested in determining if the disease could be communicated to human beings. There apparently were no known cases of the disease appearing in cattle. There were a few cases reported among mules, but the disease was essentially confined to horses.

The seriousness of this plague must be evaluated in reference to the times. First, it greatly reduced the motive power of the farmers, especially with fall plowing and planting of wheat at hand. Secondly, it was a great economic loss for the farmers of Kansas. This did not affect just the horse owners, but directly or indirectly affected the entire agricultural economy.

Estimates of losses came from all parts of the state, principally from western Kansas. Volney Miller, Ness County Attorney, estimated Ness County had already lost close to \$50,000 worth of horses by September 5, 1912.<sup>10</sup> An estimated loss for the whole state was over six million dollars of horses and undone farm work by September 14, 1912.<sup>11</sup> The malady then was spreading into 75 of the 105 counties. A more conservative estimate was made by Joe Mercer, State Livestock Sanitary Commissioner, for central and western Kansas, of over 25,000 horses dead and a property loss of nearly two and one-half million dollars.<sup>12</sup>

Horse traders were not able to trade or sell their horses; buyers became reluctant to buy or trade for fear their investment might lie down and die. The railroads were instructed not to accept any shipments of horses from counties where the plague was prevalent as designated by State Livestock Sanitary Commissioner Mercer.

While the experts were conducting their experiments and others were offering their opinions, Governor Stubbs's office was flooded with telegrams and letters from people asking for help. The following are just three examples from the many hundreds the governor received.<sup>13</sup>

We are losing and have lost about one hundred horses here of an unknown disease . . . we are very anxious to find out the cause . . . .

Enclosed we are handing you a petition signed by sixty Business

<sup>9</sup> *Ibid.*, *The Topeka Capital*, Without Date, p. 29.

<sup>10</sup> *The Topeka Journal*, September 5, 1912, p. 4.

<sup>11</sup> *Clippings*, KSHS, Unidentified Paper, September 14, 1912, p. 35.

<sup>12</sup> *Ibid.*, Unidentified Paper, September 26, 1912, p. 52.

<sup>13</sup> Editor's Note: All excerpts from letters and telegrams not otherwise identified may be found in *Stubbs Papers* (Subject File: Horse Plague).

men . . . and Farmers asking your help in sending us at once one of the state veterinarians to locate the trouble we are having in losing our horses. So many of them are dying with a very curious disease or trouble that baffles all our medical science . . . .

There is a prevailing opinion among our people that the state authorities do not comprehend the seriousness of the trouble . . . .

One Hodgeman farmer lost all of his horses and borrowed a neighbor's team to haul away the carcasses. Before he had finished this work, the borrowed team was stricken.<sup>14</sup> Another Hodgeman farmer was driving to Jetmore to secure services of a veterinarian and medicine for his sick animals. On the road his team fell victims to the plague. A borrowed horse fell dead before he reached Jetmore.<sup>15</sup> Harry Simpson, a traveling salesman, said while traveling on the Santa Fe railroad between Dodge City and Larned the sky was bright with the reflection of the ". . . horses' funeral pyres."<sup>16</sup>

It was this mass of newspaper reports, voices, letters, and telegrams which prompted Governor Stubbs to send a telegram to President Taft on August 30, 1912:

Thousands of horses are dying from strange disease in eight western Kansas counties. We are in urgent need of the ablest and best veterinarians in the government service. . . . Situation is grave.<sup>17</sup>

In reply to his message Governor Stubbs received a telegram from W. M. Hays, Acting Secretary of Agriculture. He recommended placing the horses in dry lots and feeding them plenty of green hay. Hays said the condition was due to poisoning because of drought. Governor Stubbs wired an immediate answer to the secretary:

Message from Hays Received. His remedy tried long ago and failed. I fear Department does not grasp nature of disease or seriousness of situation. It ought to send experts in Horse Disease at once. Inspectors not needed. Our Agriculture College believes disease is infectious and is spreading rapidly.<sup>18</sup>

Hays then notified Governor Stubbs on August 31 that Dr. John S. Brickley, pathologist and bacteriologist, would proceed from Salt

<sup>14</sup> *The Topeka Capital*, September 5, 1912, p. 7a.

<sup>15</sup> *Ibid.*

<sup>16</sup> *Ibid.*

<sup>17</sup> *Stubbs Papers, August 12, - September 7, 1912*, Telegram From Governor Stubbs to President Taft, August 30, 1912.

<sup>18</sup> *Ibid.*, Telegram From Governor Stubbs to James Wilson, Secretary of Agriculture, August 30, 1912.



Lake City to Topeka and report to the governor.<sup>19</sup>

The correspondence between Governor Stubbs and the federal government did not alter the mail received by the governor from the people of Kansas. Governor Stubbs became disgusted with the lack of action taken by the federal government, and on September 6 he again wired President Taft:

Our repeated request upon the Department of Agriculture for assistance in combatting disease among horses in this state seems to have been received with unpardonable neglect, or indifference to the situation. . . . It is my belief that the devastating disease will cover the state and extend into other states before it can be stopped unless the Department at Washington wakes up. I want you to know of its inefficiency in this crisis.<sup>20</sup>

While Governor Stubbs was having difficulty with the federal government, Livestock Sanitary Commissioner Mercer was having his own troubles with the same officials. After numerous exchanges, Acting Chief of the Bureau of Animal Industry A. M. Farington wired Mercer, "When the bureau is convinced that Kansas horses are infected with a contagious disease veterinarians will be immediately assigned to assist the state in controlling it."<sup>21</sup> Farington maintained, as did other federal experts, that it was forage poisoning. On September 4 Mercer wired Farington:

No greater calamity ever struck the livestock interest of Kansas than the epidemic now prevailing among horses. The attitude of your department in turning down repeated requests for assistance to control this epidemic is inexcusable and deplorable and is deserving of the severest condemnation.<sup>22</sup>

On September 7 Governor Stubbs made another attempt to find the cause or preventative for the mysterious malady. He sent a day letter to forty-four Kansas mayors. He indicated that the isolation of horses fed in dry lots and given fresh well water were apparently not as susceptible to the disease.<sup>23</sup> He asked the mayors to wire back their confirmation or denial of this assumption. The results of the survey proved to be of little value. Horses in dry lots were affected as were horses grazing in pastures, although probably not to as great extent.

Governor Stubbs's and Mercer's repeated requests for action from the federal government were finally answered. Twelve Federal veter-

<sup>19</sup> *Ibid.*, Telegram From W. M. Hays to Governor Stubbs, August 31, 1912.

<sup>20</sup> *Ibid.*, Telegram From Governor Stubbs to President Taft, September 6, 1912.

<sup>21</sup> *The Topeka Capital*, September 4, 1912, p. 4a.

<sup>22</sup> *Ibid.*, p. 4.

<sup>23</sup> *Stubbs Papers, August 12 - September 7, 1912*, Day Letter From Governor Stubbs to Forty-Four Mayors, September 7, 1912.

inarians were ordered to report to Dodge City on September 9 to assist in combatting the horse plague.

With the disease on a rampage and no known cure, desperate conditions brought a number of accusations against the state's veterinarians — "as far as I know he does not know nothing about a sick horse . . . and if that is the best man you can send out you had better call them all in and save the state expense" — , and it led to widespread fraudulent activity by those posing as veterinarians. It was not unusual to hear complaints similar to the following:

Men claiming to be veterinarians, but who are nothing more than unlicensed horse doctors who have no rights in the state at all, show up on a farm where it is known there are sick horses and offer to cure each horse for a given price, and the price is high. . . .<sup>24</sup>

The Office of Livestock Sanitary Commissioner Mercer received reports of graft and the office issued a special letter recommending dry feed, good clean well water, and shade. At the bottom of the page there was a warning to horse owners about the seriousness of graft:

In many sections of our State where the horse epidemic is raging, unscrupulous persons are taking advantage of the unfortunate conditions and grafting of the farmers by representing they have remedies that will cure the disease. This is nothing more or less than a steal, and such grafters ought to be prosecuted for procuring money under false pretenses.

I would suggest to owners of horses that they pay no money to strangers who are selling these fake remedies.<sup>25</sup>

The *Dodge City Daily Globe* on September 9 reported that the horse epidemic might cancel the District Court since people lacked transportation and did not want to leave their sick animals. The *Ness County News* reported on September 14 that the county fair had been definitely called off. The *Ness County News* also carried a bold-lettered announcement, which ran for about six weeks, warning the people that carcasses of dead animals must be buried. This was by order of the County Board of Health.

Governor Stubbs, knowing the serious nature of the epidemic and receiving many requests for assistance, decided to take another step towards finding a cure. On September 9, 1912, Governor Stubbs issued the following notice:

I hereby offer a reward of one thousand dollars (\$1,000.00) to any person who shall within thirty days discover and present me a

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<sup>24</sup> *Clippings*, KSHS, Unidentified Paper Without Date, p. 29a.

<sup>25</sup> *Stubbs Papers*, September 8, 1912 - January 8, 1913, Letter Issued by State Livestock Sanitary Commissioner J. H. Mercer, September 10, 1912.

certain safe, scientific, practical and demonstrate cure for the disease which is now causing such dreadful fatality among horses in Kansas.<sup>26</sup>

The reward was to bring hundreds of suggested remedies to the office of the governor, although not all were as politically motivated as the one which indicated "a well founded suspicion that W. H. Taft and the stand-Pat Republicans are poisoning the horses of western Kansas." The writer hoped to furnish the governor "and the Atty Gen. sufficient evidence in a few days to claim your reward."

## II. THE CURES?

The reward offered by Governor Stubbs on September 9, 1912, resulted in a flood of suggested remedies. They were of all types and from people all over the United States. There were patent medicine remedies, home-cure remedies, rubbing remedies, physical-treatment remedies, spiritual remedies, superstitious remedies and others.

Many of the remedies may be considered unusual, yet the majority of them were submitted by serious-minded people attempting to do their share in eliminating this dreadful "thing" which was killing many helpless horses.

Considerable support was present for rubbing or bathing cures. One writer suggested the following formula:

. . . first Give 1 Pint Castor oil 1 Pint Raw lin Seed oil then Smoke with Cotton Rags 1/2 hour with Sulpher Roled in the Cotton then Rub the head with Lynns Liniment then Bathe the Lions and flanks with Spts Turpentine then take a tub of hot Water and Dip Blankets in and Aply on horses Back for 2 hours Changing Evry few minutes [.]

One bathing cure was to take two pounds of "tobaccor (or more)" and boil it good and strong in a half gallon of water, then apply it by cloth to the horse's neck. Another called for a concoction of salt or epsom salts mixed with ground mustard and then drenching the sick animal.

More common were the suggested remedies calling for various mixtures or additives to the horse's feed. Among the suggestions were chopped plain onions, or onions added to liquid to make a tea; another tea was brewed from red peppers and wood ashes; and still another tea used two quarts of sage tea with an equal amount of sweet fern

<sup>26</sup> *Ibid.*, August 9, 1912 - September 10, 1912, and *The Topeka Capital*, September 10, 1912.

tea, plus one teaspoon of salt. Another proposal was to mix epsom salts and "one heaped tea spoon full of gun powder," and shake it well in a quart bottle before giving it to a horse. Additives included one quart of chopped, raw potatoes, twice a day; two grains of green coffee every seven days; a gallon of bran, moistened with vinegar and a little salt added.

It was apparent that whiskey was considered more than just medicine for man as it was submitted in various cures, most of which were given internally. Whiskey and strong black coffee to total one pint every three hours until improvement, and then twice a day until recovery, was one prescription. Another suggestion combined the previous combination with "6 raw (fresh) heneggs, hull & all, break them as you put them in mouth." Still another person suggested whiskey and Quinine Sulphate.

If milk was good for the human body, then it would also be good for horses, and many people recommended its use. One woman suggested three to four quarts of buttermilk for two to three days. Milk as a bathing solution was also submitted as a remedy: ". . . 2 pods of garlic in one quart of sweet milk. cut the garlic fine and put it in the milk drench the horse."

Some recipes were more complicated, as the one which specified one quart of milk, one teaspoon baking soda, three beaten eggs; then three hours later, "if the horse can swallow," a mixture of lard, melted fresh butter, and salt. Another would "add a tablespoon full of turpentine" to a quart of sweet milk, "shake well and pore down the horse's throat immediately."

Just about everyone had kerosene or gasoline around and as one might suspect these became major parts of many suggested cures, some of which seem severe. "Pour one pint of clear coal oil down the throat and inject one gal. of same into bowels," followed in one-half hour by "emetic on ipecac . . . . As soon as the stomach is emptied, use enemas of water to which one teaspoon of Sopade has been added to a gal." Another said, "It is a worm or worms in the Ear. Which makes the horse crazy, a 1/4 of a ounce of Kerosene poured in the ear will effect a cure."

Numerous varieties of trees and plants became ingredients of other proposed solutions. Basic elements were cockleburrs; peach tree leaves; "slippery Elm bark soaked in water and oats"; and a very complicated arrangement of "sugar tree wood and hickory wood and red corn cob" burned "into ashes" and then mixed with water. Other ingredients from fruit to pine tar were submitted.

The patent medicine companies tried their hands at winning the \$1,000.00. Sometimes they offered free samples. Some were all-purpose medicines good for animals and man and everything that ailed them.

Religious remedies or cures were also very popular. These included devout belief in simple prayers, spiritual medals, placing of the hands on the animal, and extreme claims of personal healing success.

Other forms of cures could be classified as superstitious, and a number of these were submitted. They tended to emphasize the use of goats. "It seems that the scent of the Goats is healthy to the horse," said one contributor.

"Bleeding" was still held to be a proper treatment. It had been a popular treatment of humans during an earlier period, and was used on George Washington, perhaps causing his death. Nevertheless, in 1912 and 1913 it was still popular for use with the animal kingdom. It ranged from bleeding at the horse's head to the horse's tail. Some people had actually used the method, while others had viewed the process and were writing of what they had seen. Some rather severe examples were given of bleeding: after making an incision in the head with a sharp knife, "put solt an Papper in the Split"; bleed them every week, as the blood gets too thick; and

. . . with a sharp knife he opened the sick horses forehead just above the Eyes. onley enough to loosen the Skin to put in a piece of copper coin which was about as large as a 5¢ piece which was put in and the Skin was sewed together and the horses were cured . . . .

Another bleeding remedy stemmed from the idea that blood gathers on the brain and to relieve it "take a larg awl 2 1/2 inch larrg," a sharpened point on a 30-penny nail, "and Drive in the Skull just below the Brain So he will Bleed at the nose freely and your horse is well." Cut off about one-half inch of the tail bone, said another, then when bleeding has been sufficient tie a cord around it, and put a sponge saturated with amonia to the nose of the animal. Still another said,

. . . with a Sharp awl punch five holes in each ear 3/4 of an inch apart 1/4 of an inch from the head. . . punch a two edg dirk knife under bridg of nose four inches above teeth cut off one and half inches of tail and let it bleed.

Other forms of physical treatments, or mistreatments, were offered. Some preferred a type of shock treatment, as placing a "board flat against the horses head, so that the center of the board will come just a little above the center between the eyes, then hit the board with a hammer, weighing about 1 1/2 or 2 pounds, hard enough to stun the horse." The writer added that "if the horse was too far gone to stand the above treatment," use the kerosene-in-each-ear treatment. Others advocated electric shock.

Some people who had heard about the plague felt that they had a cure or could come up with one if they just knew a little more about

it. Many people appeared to be more on the cautious side and would not submit their cures for other eyes to see. Or they would not let their cure become separated from them. One must remember that this was not unusual, as \$1,000 was a considerable amount of money. Several asked for travel expenses and then they would demonstrate their cure. One person said to put the money on deposit at a specified bank and then he would send the recipe.

Many of the cures which were submitted lacked a certain amount of validity to their effectiveness. Two certain cures, however, were offered, which stand in a class by themselves. One noted that when the disease "has run into the third stage nothing but the shotgun has proven a cure . . . ." The other said that it should be clearly established "that the horses already dead were not directly, or indirectly, poisoned, and that being the cause of death; if such be the case, the discontinuation of that practice would be the best cure obtainable."

These were samples of the cures suggested to Governor Stubbs in response to the reward offered on September 9, 1912. The governor received over 1,000 remedies for the horse plague. How many of these may be labeled as cures were for the experts to decide. Yet, one must not lose perspective on the situation which existed in Kansas. Thousands of horses had died and many were still dying. The responses, although perhaps stimulated by the reward, were by people who were deeply concerned and were doing what little they could to eradicate this terrible disease.

### III. THE AFTERMATH

There was still much speculation among the experts in late 1913 concerning the definition of this mysterious disease and what would serve as an effective cure. No one really knows why there was so much disagreement among the experts. Reports were issued in a continuous flow.

In September of 1912 Chancellor Frank Strong, University of Kansas, appointed a University Research Commission to investigate the cause of the horse plague. The Commission's report was issued on September 1, 1913, and in its opinion the horse plague should be given the name "forage poisoning."<sup>27</sup> The Commission's report also included these other findings:

This disease, so far as is known, is not contagious, not infectious, has not been transmitted from horse to horse, nor from horse to man.<sup>28</sup>

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<sup>27</sup> "Report of Results of University Research Commission on Horse Plague," *Bulletin of the University of Kansas*, Submitted by S. J. Hunter and others, Vol. XIV. No. 18 (Lawrence: University of Kansas, September 1, 1913), p. 5.

<sup>28</sup> *Ibid.*

No evidence has arisen to indicate that in water alone is to be found the cause of this disease.<sup>29</sup>

The nature of this disease suggests a poison introduced from without. The cause of this disease is associated with molds and parasitic fungi growing on grains and other vegetation. It occurred this season only among horses grazing in pastures, fed upon late cut, improperly cured forage.<sup>30</sup>

Drugs and specifics have proven practically worthless and in some cases positively harmful.<sup>31</sup>

Prophylaxis, or preventive treatment, through the exercise of proper care in feeding only pure water, well cured forage and grain in limited quantities during the period of the outbreak, is the only proven means of dealing with the disease. Where these precautions have been carefully heeded this sickness among horses has ceased.<sup>32</sup>

Supporting the finding of the Commission headed by Dr. Hunter were various reports compiled from studying vaccines that had been developed as the possible answer.

Vaccines of all kinds are worse than useless in treating or preventing the horse scourge which has killed so many horses in western and central Kansas, . . . .<sup>33</sup>

Yet there were other cases which supported the side of vaccines:

. . . The vaccine developed by Prof. T. P. Haslam, of the State Agriculture College, and his assistants, has been fully tried out with good results.<sup>34</sup>

When one expert, or group, would arrive at a name, cause, or cure others would disagree. So it would appear the name, cause, and cure of this mysterious horse disease were left unanswered. Gradually the disease died out on its own during the winter of 1913 still unnamed, undetermined, and uncured.

The \$1,000 reward offered by Governor Stubbs resulted in an abundance and a variety of cures. In an attempt to locate the possible winner, the letters and telegrams were placed in the hands of

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<sup>29</sup> *Ibid.*, p. 6.

<sup>30</sup> *Ibid.*

<sup>31</sup> *Ibid.*, p. 7.

<sup>32</sup> *Ibid.*

<sup>33</sup> *Clippings, KSHS, Infectious Diseases of Domestic Animals, Unidentified Paper, Without Date, p. 54a.*

<sup>34</sup> *Ibid.*, p. 56.

H. J. Waters, President of Kansas State Agriculture College, Manhattan, Kansas. Governor Stubbs received the following correspondence from President Waters:

Some time ago you requested the members of the Veterinary faculty of this institution to examine the claims submitted for a reward you had offered of a thousand dollars to anyone who would suggest a practical cure for the horse disease that was prevalent in this state last summer. Accordingly, I have asked Dr. Schoenleber to have his faculty discharge this duty in a very careful manner. They assure me that they have done so, and I am enclosing herewith their report. By today's express, I am returning to you all the claims for this reward which you have submitted to us.<sup>35</sup>

J. S. Schoenleber, representing the Veterinary Department faculty, gave the report in the following letter:

Dear President Waters:

I am herewith returning to you the correspondence which you submitted to the Veterinary Department a short time ago. After thoroughly and minutely considering all of the remedies and formulae contained therein, your committee begs leave to report that it has failed to find among them any proof of a single "safe, certain, scientific and practical cure" for the horse disease which was so recently prevalent in this state.<sup>36</sup>

The \$1,000 was not won because there wasn't a single "safe, certain, scientific and practical cure," as the letter from the veterinary faculty indicates.

How many horses died as a result of the horse plague in Kansas during the years of 1912 to 1913? In using figures available for the number of dead horses for a given year, care must be used because the figures do not distinguish between the mysterious horse disease and any other disease among horses. Also, one can not safely determine how many horses died because of a recommended cure, such as driving spikes into a horse's forehead! Statistics available for the state of Kansas show the total number of horses by year and the total number dead. This information is shown in Table 1. For the years 1912-1913, the years of the horse plague in Kansas, a total of 100,670 horses died from disease.

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<sup>35</sup> *Stubbs Papers, October 1 - 22, 1912*, Letter from H. J. Waters, President of Kansas State Agriculture College, Manhattan, Kansas, to Governor Stubbs, December 16, 1912.

<sup>36</sup> *Ibid.*, Letter to President Waters From F. S. Schoenleber, and others, Division of Veterinary Medicine, Kansas State Agriculture College, Manhattan, Kansas, December 14, 1912.



An item of caution must be given in comparing the two columns. The number of total horses was computed in the last month of the year. The figures regarding the deaths from disease, however, were computed for the year ending on March 1 of that year. Both columns measure periods of one year but compute at different times of the year.

Table 1

Total Number of Horses in Kansas  
Number Dead From Disease  
For Years 1911-1914

Year	Total Number Horses *	Dead From Disease **
1911	1,063,998 <sup>37</sup>	21,436 <sup>38</sup>
1912	1,045,426 <sup>39</sup>	30,133 <sup>40</sup>
1913	1,039,860 <sup>41</sup>	70,537 <sup>42</sup>
1914	1,071,434 <sup>43</sup>	19,333 <sup>44</sup>

\* Computed annually in December.

\*\* Computed annually in March.

Table 2 shows the number of horses which died from the disease in a selected number of counties. The greatest toll in the state was in Ellis county in 1912 followed closely by Barton and Jewell counties. In 1913 Ellis county again had the largest count, but this time was followed by Ness and Rooks counties.

According to the figures, it was during the period of March 1, 1912, to March 1, 1913, when the plague was at its climax, that the most horses died. After this period the disease began to decline. Indeed, the most serious period for the farmers was during the fall of 1912. The corn had to be harvested, and also a more serious problem

<sup>37</sup> *Eighteenth Biennial Report of the Kansas State Board of Agriculture 1911 - 1912*, Vol. XXIII (Topeka: Kansas Department of Agriculture, 1913), pp. 1054-55.

<sup>38</sup> *Ibid.*, pp. 1060-61.

<sup>39</sup> *Ibid.*, pp. 1056-57.

<sup>40</sup> *Ibid.*, pp. 1062-63.

<sup>41</sup> *Nineteenth Biennial Report of the State Board of Agriculture, Kansas 1913 - 1914*, Vol. XXIV (Topeka: Kansas Department of Agriculture, 1915), pp. 990-91.

<sup>42</sup> *Ibid.*, pp. 996-97.

<sup>43</sup> *Ibid.*, pp. 991-92.

<sup>44</sup> *Ibid.*, pp. 997-98.

TABLE 2  
 Total Number of Horses in Each County  
 Number of Horses Dead From Disease  
 In A Selected Number of Counties  
 Years 1911-1914

County	1911	1912	1913	1914
Allen	9,657	9,803	11,260	10,581
Barton	13,361	13,209	12,673	13,419
Decatur	8,846	8,064	8,245	8,586
Ellis	12,594	12,576	10,673	12,117
Finney	5,072	5,035	4,973	4,923
Ford	9,556	10,038	9,697	10,436
Graham	9,975	8,823	7,483	8,948
Jewell	19,586	19,094	18,663	19,424
Mitchell	13,874	13,476	13,094	13,860
Ness	9,283	8,873	7,171	7,061
Osborne	14,365	14,046	12,873	13,854
Rooks	11,955 <sup>45</sup>	11,511 <sup>47</sup>	10,422 <sup>49</sup>	11,011 <sup>51</sup>
		365 <sup>48</sup>	2,386 <sup>50</sup>	132 <sup>52</sup>
				204
				367
				102
				248
				114
				275
				063
				459
				233
				088
				102

<sup>45</sup> Eighteenth Biennial Report, 1911 - 1912, pp. 1054-55.

<sup>46</sup> *Ibid.*, pp. 1060-61.

<sup>47</sup> *Ibid.*, pp. 1056-57.

<sup>48</sup> *Ibid.*, pp. 1062-63.

<sup>49</sup> Nineteenth Biennial Report, 1913 - 1914, pp. 990-191.

<sup>50</sup> *Ibid.*, pp. 996-97.

<sup>51</sup> *Ibid.*, pp. 991-92.

<sup>52</sup> *Ibid.*, pp. 997-98.

was at hand, that of fall plowing for wheat. Despite the problems there were examples of hope:

The railroads may make an offer to haul free and give express service on gasoline and steam traction engines and plows to Western Kansas so that the farmers will be able to plow for the fall sowing of wheat. . . .<sup>53</sup>

In Central Kansas many of the farmers owning tractors and plows have finished their work and some of them have notified the railroad company they would be willing to take their machines into the infected district and do the plowing at cost to help out the stricken farmers.<sup>54</sup>

Despite this generous solution, there remained a major problem. There were not enough tractors in Kansas to do all of the necessary farm work. In 1915, Kansas only had 2,493 tractors, and in 1916, only 3,932.<sup>55</sup> A conservative estimate would be that during the fall of 1912, Kansas had fewer than 1,500 tractors. Thus, many Kansas farmers were still faced with the problem of fall plowing.

Since there were not enough tractors or horses to do the work, the people were forced to use other means.

Jacob C. Mohler, assistant secretary of the state board of agriculture, says that while gasoline and steam tractors will help considerably in getting in a crop of wheat this fall, in absence of horses, steers, and even cows, broken to work would do more good.

Not everyone is able to buy a tractor or a team of horses, but nearly all the farmers have cows, or steers to yoke up to their farm implements.<sup>56</sup>

Such was the case as farmers were forced to turn to a more primitive way of farming. Modern gas motor tractors and old-style yokes of steers are working side by side on the wheat ranch of Peter Jobs, in northern Rush County, plowing the ground for wheat. Mr. Jobs, who has 600 acres of wheat to sow, was desperate because the recent horse epidemic killed two-thirds of his horses and rendered it impossible for him to get teams for his plows. None of his neighbors would risk their horses in the fields. Finally Mr.

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<sup>53</sup> *Clippings*, KSHS, Unidentified Paper, Without Date, p. 38.

<sup>54</sup> *Ibid.*

<sup>55</sup> *Twentieth Biennial Report of the State Board of Agriculture, Kansas 1915-1916*, Vol. XXV (Topeka: Kansas Department of Agriculture, 1917), p. 676.

<sup>56</sup> *The Topeka Capital*, September 17, 1912, p. 39.

Jobs managed to secure a gas motor tractor, which he set to work pulling gangs of plows. And he made use of two yokes of steers, which are working in the same wheat fields, alongside of the most modern plowing machinery.<sup>57</sup>

Finally, this dread disease, which had killed so many horses, itself died out. Just as storm clouds suddenly appear on the horizon of the Kansas prairies and disappear, so had the horse epidemic. Just as a storm often leaves destruction after passing, so had the horse plague. There was no common name for it and there was no common cure. At last, the people would no longer have to stand helpless and watch their beloved animals die. It was over.

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<sup>57</sup> *Clippings*, KSHS, Unidentified Paper, Without Date, p. 53.