

THE COMPARATIVE VALUE OF THE HORSE AND MULE,
and of the market conditions.

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Introduction and Object:

In the following it will be the object to show the cost of raising, training, and placing on the market, the carriage and coach horse, the draft horse, and the mule.

The prices of horses and mules on the markets of the United States for past years shall also be shown and the demands at the present time. One object will be to see which will bring the average stock raiser and farmer the most clear profit, the carriage horse, draft horse, or mule, also which will be the best and most economical to raise under farm conditions.

Horses are usually classified into two divisions: Saddle horses and draft horses. They are further classified into the following subdivisions: Saddle horses include, racer, hunter, hack or roadster, and draft horses include carriage and coach horses, and agricultural and heavy draft horses.

Market Classes of Horses.

In the Chicago market there are five distinct classes of horses. Only about sixty per cent of all the horses coming on the market fill the requirements of these five classes. The market classes represent the useful types. There are middle gaps between these classes and any horse that falls between these classes is a cheap horse.

"The market classes are established, not according to the age of the animal or degree of soundness, but according to the size, conformation, style, and quality and finish. That is, utility for particular purposes, and is the basis and principle of classification."

Class A. Road, Carriage and Coach horse

Class B. Cab horse

Class C. Bus horse

Class D. Draft horse

Class E. The American trotter.

Coach and Carriage horses

According to George Rammel, the ideal carriage horse should be sixteen hands high and weight twelve-hundred pounds when in good condition, with full made body, clean cut intelligent head, neatly carried ear, full eye, wide nostril, neck well arched, muscular and of good length, with the wind-pipe clearly defined. The shoulders should be sloping, muscular, but not meaty. The body should be roomy, good depth of chest, muscular, etc. The legs should be well set, straight, and entirely free from muscular tissue below hocks and knees. Pasterns should have good slope. The feet should be of good size, with dense horn, large frog, and high inside heels. The bone of the horse should be strong but not coarse. Quality and soundness are absolutely essential to the carriage horse. Action is of the utmost importance. This should be high, bold, free, straight, level, even, and well bal-

anced. High action adds to the value of horses of this type, but should not be carried to the point of becoming an absurdity, neither should height be gained at the expense of liveliness and accuracy. Good all round action is much preferable. No tendency to pace or mixed gaits should be allowed.

A certain amount of speed is essential. A carriage horse should be able to trot a mile in three minutes and travel ten to twelve miles per hour. They should also be able to walk fast.

Color is not of vital importance, but a few colors are more fashionable than others. At present brown horses are preferable, bays second, chestnuts third, and grays fourth. Blacks are used mostly for funerals and other solemn occasions.

About the only difference between the coach and carriage horse is that the coach horse is intended for heavier work, so should be strong, but it is not necessary for the coach horse to have much speed, but should have great endurance.

In discussing the coach and the carriage horses, the first thing that will be considered is the feed of the colt. It is of greatest importance in raising colts, that they get a good healthy start early in life. Soon after birth the colt should get a good draught of colostrum milk. This milk will start the digestive system to operating properly. If this result is not obtained then a small dose of castor

oil should be given. The foal and dam should be watched closely for a few days. Some mares give too much milk. In this case scouring will result, and part of the milk should be milked from the dam before the foal is allowed to suck. Parched flour, rice meal, ground, or boiled milk should be given to the colt. If the mare does not give enough milk, cows milk may be given, which has been diluted one-fourth with water, and a little sugar added. Constipation is another common evil. This can be ~~used~~^{relieved} by using castor oil. The mare should be given grain if possible while the foal is young, which will stimulate the flow of milk.

The foal should be taught to eat grain as young as possible. Usually when they are about a month old they may be taught to eat a little grain, either by feeding them out of the hand or by having the box where the mare eats low enough for the foal to reach. As soon as they learn to eat they should have a feed box where the mare cannot get at it. If a little grain is put into it at feeding time, the colt will soon learn to clean it up. Oats is the best grain to feed the colt, although a little shelled corn, added occasionally will be good for it. When the foals are five or six months old they are weaned. When weaning time comes they should be taken from the dam and placed in a box stall or paddock, where they cannot hurt themselves. They should never be allowed to suck after they are first taken away. If they have been eating well be-

fore weaning there will be no backset in their growth. Their allowance of grain should be increased at this time; two to three pounds of oats per day may safely be given. Two or three colts should be placed together at weaning time as they will be companions for each other.

Handling and care

The handling of the colt should be given as soon as he is born. At all times the colt should be treated gently but firmly. The colt should be well halter broken by weaning time. From this time on the colt should be tied up frequently so that at the time the training proper comes, he will know that he is not the master.

The colt should have warm, well ventilated quarters at night in the winter, and should have a dry place to get into during stormy weather, but they should be out in the open air where they can take exercise in the day time.

The colt should be fed about two pounds of grain at weaning time. This amount should be gradually increased to about three pounds at one year old. During the first winter the colt should be fed some alfalfa, to furnish protien. He should also have some other roughness as oat-straw or corn fodder. During the first six months of a colt's life it should increase in weight at an average of about two pounds per day. After this age the increase in weight will not be so great. The second summer the colt can run on pasture and should have a little grain, but not very much. The second winter the colt should have about four pounds of grain, and some alfalfa hay and other roughness. The third summer the

colt should have good pasture, but as the training should begin now, to a limited extent, the colt will have to be fed in accordance to the amount of work done.

The Horse.

When the colt becomes three years old and the training has begun he will be considered as the horse. A few rations will be considered, such as are given by the different authorities as are suitable for the horse during training and other work. According to the Woff--Lehman feeding standards, a one-thousand pound horse at light work should have the following ration:

Total dry matter	Digestable nutrients			Nutriative ratio.
	total	Pro.	Carbo. Fat.	
20	11.4	1.5	9.5 .4	1: 6.93

A good ration would be the following:

Feed	Total dry matter	Total digest. matter.	Pro.	Car.	Fat.	Nut. R.
Oats	4	3.56	.38	1.93	.167	1 : 6.2
Corn	4	3.56	.285	2.64	.198	1 : 10.8
Alfalfa	6	3.57	.79	2.35	.053	1 : 3
Praire hay---	6	3.09	.036	2.81	.118	1 : 84
Total-----	20	13.78	1.496	9.63	.526	1 : 7

At present protien can be supplied the cheapest with alfalfa. Some alfalfa should be given to the horse every day, as it furnishes protien and tends to keep the horse loose. The exact amount of feed must be determined by the individual horse. He should be kept in good flesh at all times.

Cost of Marketing a Carriage Horse.

Service fee		\$ 15.
Feed for first year, 10 bu. oats @ 32¢ per bu.		3.20
Pasture second year, 6 Mo. @ \$1.00 per Mo.		6.00
Feed " " , 10 bu. oats @ 32¢ per bu.		3.20
" " " , 10 " corn @ 35¢ " "		3.50
" " " , 600# alfalfa hay @ \$6 per ton		1.80
" " " , 400# prairie " @ \$4.50 " "		.90
" third " , 25 bu. oats @ 32¢ per bu.		8.00
" " " 25 " corn @ 35¢ " "		8.75
" " " 1000# alfalfa @ \$6.00 per T.		3.00
" " " 1500# prairie hay @ \$4.50 per T.		3.37
" " " 5 months pasture @ \$1 per month		5.00
" " " 100# bran @ 80¢ per cwt.		.80
" " " 100# oil meal @ \$1.50 per cwt.		1.50
" fourth " 30 bu. oats @ 32¢ per bu.		9.60
" " " 30 bu. corn @ 35¢ per bu.		10.50
" " " 1500# alfalfa @ \$6.00 per T.		4.50
" " " 1500# prairie hay @ \$4.50 per T.		3.37
" " " 100# bran @ 80¢ per cwt.		.80
" " " 100# oil meal @ \$1.50 per cwt.		1.50
" " " 5 months pasture @ \$1 per month.		5.00
Expense of training		25.00
		<u>\$114.29.</u>

The Draft Horse.

The typical horse should stand sixteen hands high or over and should weigh at least sixteen hundred pounds. Weight is absolutely essential for the pulling of heavy loads. The entire form should suggest strength for heavy hauling. He should be broad, deep, thick and round, on short, strong hind legs, showing marked development and prominence of tendons. The head should be good sized but free from all coarseness. The neck should be strong, well arched, and covered with muscle. The shoulders should be moderately sloping, smooth, and well covered with muscle. The chest should be of sufficient size to give ample capacity for accommodation and free action of the heart and lungs. The ribs should have a round, deep bevel. The back should be short, wide, thick, and strong, giving for the attachment of large, powerful muscles. The hips should be wide, and well muscled. They should also be free from prominent angles. The feet should be good sized, sound in texture, waxy and healthy in appearance.

The breeds most adapted to ^{American} ~~Mexican~~ conditions are the Percheron, Clydesdale, English Sire and Belgian. The following is the total number of the different breeds of draft horses that have been recorded in the United States to January 1, 1906.

Percheron	32,036	Clydesdale	12,370
English Shire	8,210	Belgian	2,322.

From the above list it will be seen that the Percheron breed is the most popular with the Americans.

The feed and care of the draft colt until he is three years old is the same as for the carriage horse, except that the draft colt being larger, will require more food.

The colt must be fed in proportion to his weight.

Draft colts may be kept ^{together} more like mules than carriage horses. This makes the stabling of them less expensive than carriage horses. When the draft horse is three years old the training should commence. About all that is required in training a draft colt is to hitch it up with a good steady horse. After it has been hitched a couple of times it can be put to some light work. If the colt is worked at ordinary work, it must be fed well. The Wolff-Lehman Standards for horses at medium farm work call for the following ration per 1000 pound weight:

D. M.	Pro.	Car.	Fat.	N.R.
24#	2#	11#	.6#	1 : 6

The following would be a good ration.

Grain	Mnt.	Pro.	Carbo.	Fat.	N.R.
		Pre			
Oats	5#	.462	2.417	.209	
Corn	5#	.357	3.306	.248	
Alfalfa	10#	1.324	3.926	.089	
Oats straw	4#	.048	1.535	.029	
Total	24#	2.191	11.184	.575	1 : 5.7

If the horse can be pastured at night he will grow better. The following winter the horse should be well fed and stabled, as his growth is practically completed at this

time. The fourth summer the horse should have about the same treatment and care as he has received the third. In the fall after he is four years old, he should be put into the stable to fatten. If he is stabled in the fall his hair will be smoother. The following is the method used by the Coffin Bros. of Illinois to fatten draft horses. The horses are put into the stable and fed three times a day.

Two feeds are composed of bran, shorts and oats, and the third feed is corn and ground clover hay. They do not use condition powders or stock foods. They get no exercise, the water being pumped into the stables. Coffin Bros. fatten from one thousand to seventeen hundred horses per year in this manner. Their average gain on large horses for three months is about one hundred pounds per month.

One Kansas breeder of pure-bred Percherons uses corn chop, alfalfa and corn fodder, using a balanced ration when fattening his horses for the show ring. One mare he fattened gained over six pounds per day for thirty days. His stallions often gain five pounds per day for thirty days.

Cost of Marketing the Draft Horse.

Service fee		\$ 15.00
Feed for first year, 10 bu. oats @ 32¢		13.20
" " second year 12 bu. oats @ 32¢		3.84
" " " " 12 bu. corn @ 35¢		4.20
" " " " 700# alfalfa @ \$6.00		2.10
" " " " 500# prairie hay @ \$4.50		1.12
" " " " 6 months pasture @ \$1.00		6.00
" " third " 48 bu. oats @ 32¢		15.36
" " " " 35 bu. corn @ 35¢		12.25
" " " " 2000# alfalfa @ \$6.00		6.00
" " " " 1500# oats straw @ \$2.00		1.50
" " " " 100# bran @ 80¢		.80
" " " " 100# oil meal @ \$1.50		1.50
" " " " 5 months pasture @ \$1.00		5.00
" " fourth " to January 1.		
" " " " 50 bu. oats @ 32¢		16.00
" " " " 50 bu. corn @ 35¢		17.50
" " " " 200# alfalfa @ \$6.00		6.00
" " " " 400# straw @ \$2.00		.40
" " " " 200# bran @ 80¢		1.60
" " " " 150# oil meal @ \$1.50		2.25
" " " " 4 months pasture @ \$1.00		4.00
Total-----		\$125.60.

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The Mule.

There are two kinds or classes of mules, one the produce of the male ass and mare, and the other the offspring of the stallion and female ass. The first is properly called the mule, while the second is called the hinny. The mule partakes of the characteristics of both its parents, having the head, ear, foot and bone of the jack and the height and body of the mare, while its voice is between that of the jack and mare. It has the patience, and sure footedness of the jack and the vigor, strength, and courage of the horse.

The mule was used by the ancients. It is mentioned in the Scriptures before the horse. The sons of King David always rode mules, and they were brought to Solomon to pay taxes with and have been used for that purpose ever since. The Nobles of Spain rode and drove mules and one team of carriage mules sold in the streets of Lisbon for \$1500. At present they are used about entirely for work and not for pleasure. The market classification of mules usually includes five groups which are as follows:

- a. Plantation mules; two classes of these; sugar and cotton mules. Sugar mules are the best type, which must be fifteen to sixteen and a half hands high, while cotton mules are fourteen to fifteen and a half hands high and weigh nine hundred to a thousand pounds.
- b. Lumber mules; fifteen and a half to seventeen hands high.

c. Railroad mules; fifteen and a half to sixteen and a half hands high and must weigh twelve hundred to fifteen hundred pounds.

d. Mine mules; vary from eleven to fifteen and a half hands in height and must be dark in color.

e. Levee mules; about the same as railroad mules, except better in quality.

The Kind of Sire to Breed from.

There are several varieties of jacks in the United States. The Catalonian is considered the best of the imported jacks. He should be black with white points, of good style and action, and from fourteen and a half hands to fifteen and a half hands in height. The native jack is considered better than the imported one because he is acclimated. As a rule he produces better colts than the imported one.

The Kind of Mare to Breed from.

The mare should be one of the best that it is possible to obtain and not any old mare as is often used. If the dam is not good, it is not possible to raise a good high priced mule. The mare should have a cross of thorough-bred blood in her of at least one fourth, and the other cross should be of some of the larger breeds. The mare should have good style, good length, large barrel, good head, long neck, good, broad, flat bone, broad chest and wide between the hips. The thorough-bred blood gives

mule life and action and endurance, while the other blood gives the size, that is so important.

The mule colt should be cared for about the same as the horse colt up to weaning time. At weaning time the colts can all be put together. At this time they should be fed well with oats, green corn and alfalfa or clover. They should be fed often as they do not eat much at one time. After they have been from the dams a few days they may be turned to pasture, but should be fed grain every day. During the first winter they should be fed oats and shelled corn. Feed all they will clean up after each feed. They should have some alfalfa and should have access to all the straw want all the time. The second summer they should run on pasture. For about a month after being turned out they should live on grass alone, which will tone up the system after the winter's feeding. After about a month the colt should be fed some grain at least once each day. The second winter the colt should be fed the same as the first winter, except that he will eat more. The summer after they are two years old they may be broken and worked at light work, but should not be over worked.

To Fatten the Mule.

To fatten the mule he should be put into the barn or lot about the first of May after they are two years old. Green clover or alfalfa should be cut every morning and put into their manger. Their trough should be kept full of

shelled corn and oats. Plenty of pure water should be kept before them at all times. As soon as roasting ears are at hand, the corn should be cut, and the stalks put into the mangers and the ears into the trough. Oats, shelled corn, and roasting ears should be kept before the mule at all times, but their feeds should never be mixed. Toward the latter part of summer some bran should be fed. The barn should be kept well bedded so the hair will not be soiled. If the mules were of good size when the fattening is started, and the feeding properly carried out, they should weigh from eleven hundred fifty to thirteen hundred fifty pounds by the first of September. This is when the market opens for this class of mules.

The cotton mule is fed about the same as the other mule, except that he is put into the pen about the first of August and ready for market about January 1st. The mule should be kept in warm quarters during the winter and should have plenty of salt all the time. He should be kept growing as fast as possible. The saying, "Time is money" applies to the mule industry.

Cost of Marketing the mule.

Service fee		\$10.00
Feed first year, 3 bu. oats @ 32¢ per bu.		.96
" " " 3 bu. corn @ 35¢ " "		1.05
" " " 1000# alfalfa @ \$6 per ton		3.00
" second " 10 bu. corn @ 35¢ per bu.		3.50
" " " 10 bu. oats @ 32¢ per bu.		3.20

Feed second year, 1200# alfalfa @ \$6.00 per ton	3.60
" " " 1200# prairie hay @ \$4.00 per T.	2.70
" " " pasture 6 months @ \$1 per month	6.00
" " " 100# oil meal @ \$1.50 per cwt.	1.50
" third " 1 month pasture @ \$1.00 per month	1.00
" " " 25 bu. corn @ 35¢ per bu.	8.75
" " " 25 bu. oats @ 32¢ " "	8.00
" " " 1000# alfalfa @ \$6 per ton	3.00
" " " Green corn and fodder	5.00
" " " 50# bran @ 80¢ per cwt.	.40
" " " 100# oil meal @ \$1.50 per cwt.	1.50
Total-----	<u>\$63.16</u>

In all the above data the work that the mare does is supposed to offset the interest on the money invested in her, also to pay for her keeping through the entire year. From the above data we see that a driving horse may be put onto the market for about \$115.00, a draft horse for about \$125.00, and a mule for about \$63.00, by the stock raiser who raises all his feed. The mule may be put on the market in about half the time, and with one-half the expense of the draft horse. In marketing the draft horse two good summers' work may be obtained from him which will nearly pay for his keeping. In marketing the coach horse or carriage horse, he does no work to help pay for his feed.

Mules are comparatively free from blemishes and unsoundness that hurt their sale or usefulness. An unsound-

ness in a carriage horse detracts about twice as much from his value as the same unsoundness would in a draft horse.

The following gives the number of farm animals in the United States from 1880 to 1906, with their value. These statistics were compiled from the U. S. Govt. Reports.

Year	Horses		Mules	
	number	value	number	value.
1880	11,201,800	\$613,296,611.	1,729,500	\$105,948,319.
1885	11,564,572	852,282,947.	1,972,569	162,497,097.
1890	14,213,837	978,516,652.	2,331,027	182,394,099.
1895	15,893,318	576,730,580..	2,333,108	110,927,834.
1900	13,537,524	603,969,442.	2,086,027	111,717,092.
1905	17,057,702	1200,310,020.	2,888,710	251,840,378.
1906	18,718,578	1,510,889,906.	3,404,361	334,680,520.

From the above data we see that the number of horses and mules in the United States is steadily increasing. The number of horses exported in 1892 was 3,226 and the number of mules exported was 1,965. In 1905 there were 34,822 horses and 5,826 mules exported. This shows a rapid increase both for home use and export trade. The following table gives the average price of horses and mules for the years 1901 to 1905:

Date	Drafts	Carriage teams	Mules
1901	\$130	\$300	\$93.31
1902	137	312	97.60
1903	144	311	121.47

1904	165	377	112.90
1905	181	375	110.79
1906	200	400	133.75

From the above data we see that the price of horses and mules is steadily increasing. The above gives the average price.. The best grades of stock sold at higher prices than these.

At present prices a good carriage team will bring from three hundred to six hundred dollars. It costs about \$230 to place them on the market at five years old. Good draft horses can be put on the market at about \$125, less their wages for the two summers' work. At present good ones are selling from \$250 to \$400 each. Mules can be put on the market for about \$63 at 2 1-2 years old. At present prices good mules are worth from \$150 to \$250 each. The demand for mules is steadily increasing, owing to the construction of the Panama canal.

Each animal has his place, the carriage horse for fancy driving, the draft horse for heavy pulling, and the mule for almost any kind of hard work. The location of the stock raiser should determine, to a certain extent, the kind of stock that he should raise. If the farmer and stock raiser wants good and also quick returns for his labor he should raise mules. Mules can be kept together like cattle so that more head may be raised with the same amount of labor. If the farmer does not wish his profits quite so soon but wishes to realize more off of each

animal he should raise draft horses. If he raises draft horses he should raise large ones. In past years on the Chicago market, the extra weight of horses over fourteen hundred pounds up to eighteen hundred pounds has sold for about twenty five cents per pound. At this price the stock raiser cannot afford to send a horse to market that is not fat.

It will not pay the average farmer and stock raiser to raise carriage horses, unless he puts all his time into the work and understands the training of them. It does not pay to raise light horses and put them onto the market untrained because of the relatively low price which they bring. Whatever kind of stock a man raises he should raise the best. In this way he will take a pride in his work and will also get the highest prices on the market for his animals.

The following is a tribute of Henry Ward Beecher to the horse:

"Society owes to the horse a debt of gratitude a thousand times greater than it does to thousands of man who ~~adore~~^{abuse} him. He has ministered to progress, he has vitrually extended the strength of man, doubled his time, decreased his burdens, and becoming his slave has relieved him from drudgery and made him free. For love's sake, for the sake of social life, for eminent moral reasons, the horse needs to be bred, trained and cared for with scrupulous care."

C. J. Gore.