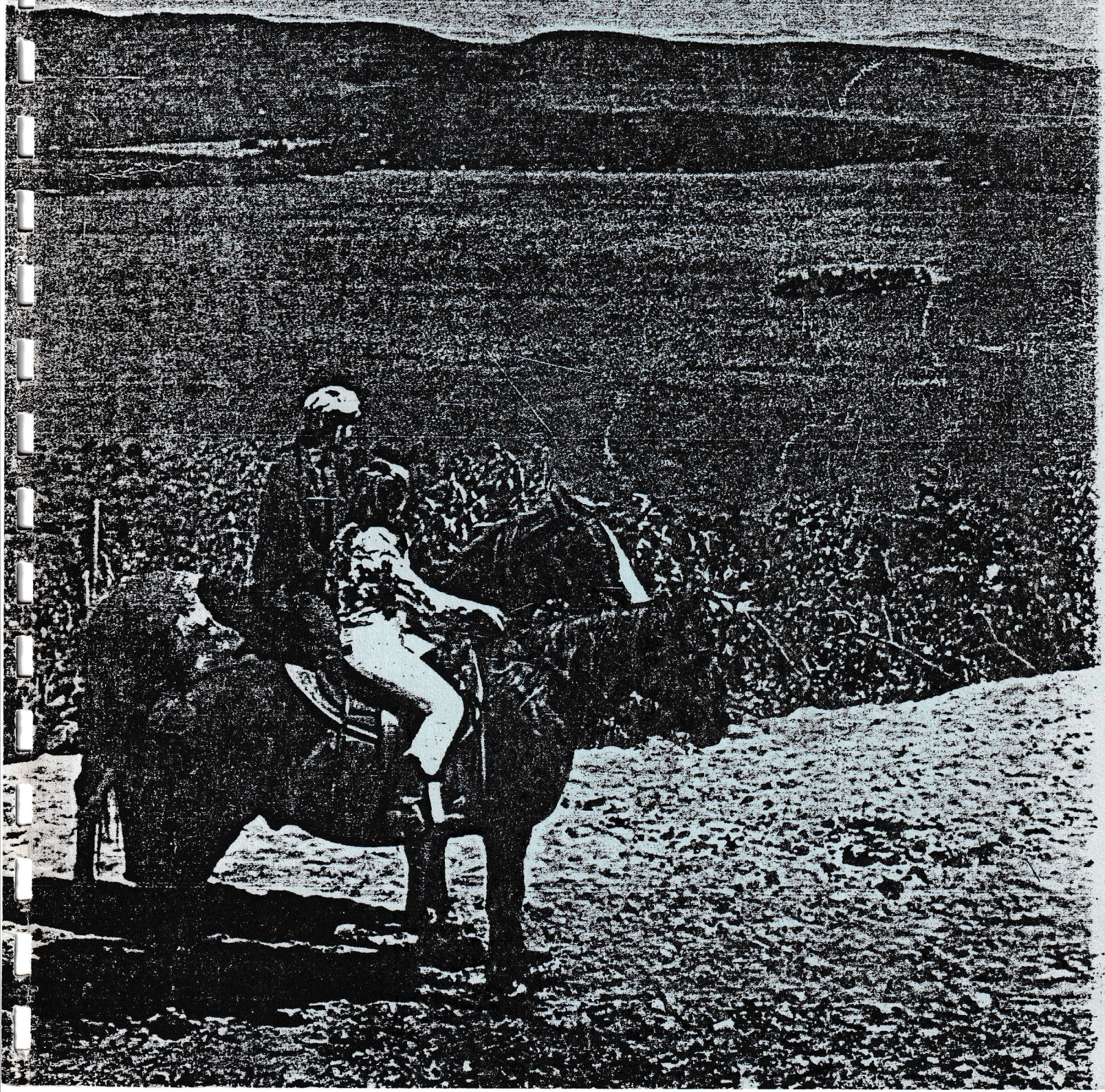


**NEW YORK  
EQUINE SURVEY  
1978**





STATE OF NEW YORK  
DEPARTMENT OF AGRICULTURE AND MARKETS  
ALBANY

J. ROGER BARBER  
COMMISSIONER



It is a pleasure to present to you the results of the first survey ever conducted on New York State's equine industry.

For the past several years, organizations concerned with the horse industry in New York State have requested that such a survey be made and the "Department" concurs that accurate statistics are imperative to the continuing needs of the equine industry.

This survey was conducted by the New York State Crop and Livestock Reporting Service and I want to personally thank all of those who responded to the data requests that were so essential for compiling this reliable information. I want to especially recognize the financial assistance provided by the N. Y. S. Horse Breeding Development Fund and the N. Y. S. Thoroughbred Breeding & Development Fund.

The N. Y. S. Department of Agriculture is proud to have been a part of this first survey and it is intended that studies will continue to compile data to show the economic importance of the state's equine industry.

Sincerely,

J. Roger Barber

# REPORTING DISTRICTS

## NORTHERN

The Adirondack Mountains occupy the southeastern area of the district. In the Saint Lawrence Valley the lowlands are flat and undulating, and in some areas rock outcrop is common. Soils are lake-laid clays, with some problems of both surface and internal drainage. Agriculture is mainly dairy and forage crops. District acreage is 3.43 million acres. Population is 233 thousand or 1.3 percent of the State's total. Primary population centers are Watertown, Ogdensburg and Massena.

## NORTHEAST

Major portion of the area is Adirondack Mountains. Northern portion is agricultural, primarily dairy and forage crops. The district covers 4.60 million acres with a population of 222 thousand people. Plattsburg is the largest population concentration but Lake Placid is well known as a summer and winter resort area and will host the 1980 Winter Olympics.

## WESTERN

This is an important farming region. It is a lowland plain, mostly undulating to level, with soils primarily derived from limestone. Wide spread agriculture of cash grain crops, tree fruits, vegetables and livestock. One of the more important commercial horse farm and breeding areas of the State. Two major harness tracks (Batavia Downs and Hamburg Raceway) and the Finger Lakes Raceway flat track are in this area. District acreage is 4.05 million acres. The Buffalo and Rochester areas are the primary population centers. This area's population of 2.44 million accounts for over 13.5 percent of the State's total population.

## CENTRAL

Western portion of the area is important in grain production. The entire area is heavy in dairy production. Vernon Downs harness track is located in this area. This region has a population of 1.21 million people and 5.24 million acres of land. Syracuse, Utica and Rome are the population centers.

## EASTERN

Bordered to the North by the Adirondack Mountains. The farming areas are mainly undulating to rolling. Poor drainage is only a moderate problem for the area but is important in isolated areas. Dairy, fruit and in some areas vegetables are important. Population is 934 thousand, over 5 percent of the State's total. The Tri-City area of Albany, Schenectady, and Troy is the primary population concentration. This region has 2.93 million acres and contains the Saratoga harness track and the Saratoga flat track. There are a number of horse breeding farms in the area.

## SOUTHWEST

Western portion of the "Southern Tier" area. Soil drainage improves from west to east. Nearly one-half of the soils in the western part are classified as somewhat poor or wetter. Soils in the valleys are mainly gravelly loams responding well to fertility practices. This is primarily a dairy region with potatoes, grapes and vegetables as important crops. Population in the area is 383 thousand just over 2 percent of the State's total. Jamestown is the only major population concentration in the area. The district covers 3.11 million acres.

## SOUTHERN

Central portion of the "Southern Tier" area. Soil drainage improves from west to east. About one-fourth of the soils in this area are classified as somewhat poor to wetter. Soils in the valleys respond well to fertility practices. This is primarily a drier region with potatoes and vegetables important crops in some areas. Binghamton and Elmira are the primary population centers. The population in this area is 469 thousand, less than 3 percent of the State's total. The acreage in this region is 1.58 million acres. Tioga Park, a Quarter Horse track, is located in this area.

## SOUTHEAST

This district consists of the eastern part of the "Southern Tier" and the southern portion of the Hudson Valley region. Some soils are somewhat shallow and stony but many respond well to treatment. Poor drainage is only a moderate problem. Primary farming includes dairy, poultry, fruits and vegetables. Population is 2.04 million, over 11 percent of the State's total. Primary concentration is in the counties north of New York City. Yonker's Raceway and Monticello Raceway, both harness tracks, are located in this area along with a number of horse breeding operations. The acreage in this district is 4.71 million acres.

## LONG ISLAND

(Including New York City)

This area includes Nassau and Suffolk counties as well as New York City and its boroughs. Area has a low relief and mainly sandy soils. Because of the nearness to New York City and its population concentration the easily worked soils have been developed into an area of intensive agriculture, now confined to Suffolk County. Vegetables and potatoes, heavily fertilized and commonly irrigated are the major crops. This area's population is 10.0 million, or nearly 56 percent of the State's total population. Belmont Park is on the site of the original flat track racing in this country. Aqueduct, another flat track, is here in addition to the Roosevelt Raceway harness track and Suffolk Downs Quarter Horse track. This Long Island district has 965 thousand acres.

# NEW YORK EQUINE POPULATION

The estimated number of equines in New York on August 1, 1978 was 180,000 head (See Table 1). The Southeast area of the State with 52,000 led all districts and accounted for 29 percent of the State's total. Western and Central areas reported the second and third highest numbers of 29,150 and 28,800 head, respectively, with each

constituting about 16 percent of the State's total. The remaining areas accounted for 39 percent of the total with 14,250 head in the Long Island (New York City) district; 13,950 in the Southwest district; 13,250 in the Southern district; 13,000 in the Eastern district; 10,100 in the Northern district; and 5,500 in the Northeast district.

## EQUINE BY CLASS

### LIGHT HORSES

Of the 180,000 total equines in New York, 139,400 or 78 percent were classed as light horses. Light horses are primarily used for riding, driving and racing. The most popular breeds in the State are the American Quarter Horse, Appaloosa, Standardbred and Thoroughbred. Nearly one-third or 45,200 light horses were in the Southeast reporting district. The Western district had 23,900 or 17 percent of the State's light horses while the Central district with 20,500, had about 15 percent of the total.

### DRAFT HORSES

Draft horses in New York totaled 5,400 and represented 3 percent of the State's equine. Draft horses are primarily used for pulling heavy loads, farm work and show. The Belgian is the most popular breed in the State. Over 25 percent or 1,450 draft horses were in the Central reporting area. The Northern and Southwest areas both had 1,150 draft horses or 21 percent of the State's total. About eighteen percent or 1,000 head are located in the Southern district. Of the remaining 12 percent of the draft horses in the State, the Western and Southeast districts each reported 200 head; the Northeast and Eastern districts reported 100 head each; and the Long Island area reported 50 head.

### PONIES

Ponies in New York totaled 33,000 or 18 percent of all equines. The primary uses of ponies are for pleasure and show. The most popular breeds in New York are the Shetland and Welsh. Ponies are more evenly distributed across the State than the other classes of equine. The Central reporting district had 6,700 or 20 percent of the ponies in the State. Nearly 18 percent or 5,900 were in the Southeast district. Both the Western and Southwestern areas each had 4,800 ponies or about 14.5 percent of the State's total. The Southern reporting district had 10.5 percent or 3,450 ponies while the Northern area reported 3,150 head, or 9.5 percent of the total. Nearly 13 percent of the State's ponies were in the remaining districts with 2,000 in the Northeastern area; 1,600 in the Eastern area; and 600 in the Long Island area.

### MULES AND DONKEYS

Mules and donkeys totaled 2,200 and constituted slightly more than 1 percent of all equines in the State. Historically mules and donkeys were used as draft animals, but today they are primarily pets and curiosities. More than one-third of the mule and donkey population in the State were located in the Southern reporting district and nearly one-third were in the Southeastern area.



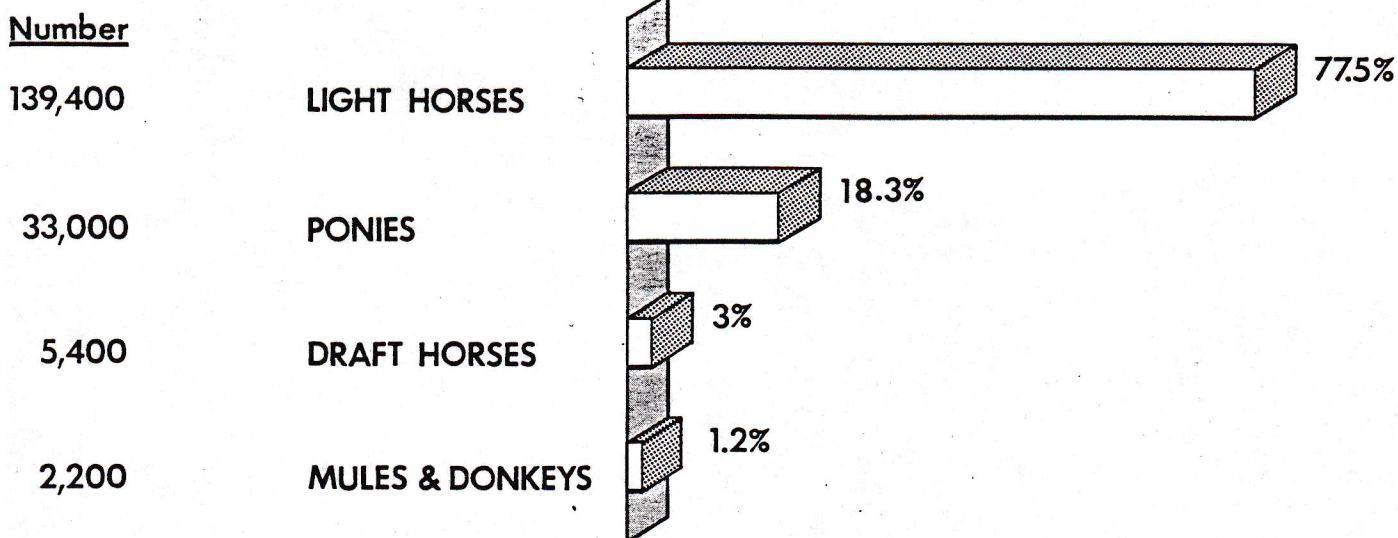
Photo by New York State Thoroughbred Breeding and Development Fund

**Table 1. - NUMBER OF EQUINES BY CLASS IN NEW YORK , 1978**

District	Total Equine	Light Horses	Draft Horses	Ponies	Mules and Donkeys
			<u>Number</u>		
Northern	10,100	5,700	1,150	3,150	100
Northeast	5,500	3,400	100	2,000	*
Western	29,150	23,900	200	4,800	250
Central	28,800	20,500	1,450	6,700	150
Eastern	13,000	11,200	100	1,600	100
Southwest	13,950	7,900	1,150	4,800	100
Southern	13,250	8,000	1,000	3,450	800
Southeast	52,000	45,200	200	5,900	700
Long Island	14,250	13,600	50	600	*
STATE	180,000	139,400	5,400	33,000	2,200
% of State Total	100.0	77.5	3.0	18.3	1.2

\* Less than 50 head.

### EQUINE BY CLASS



# EARLY HISTORY OF THE HORSE IN THE UNITED STATES

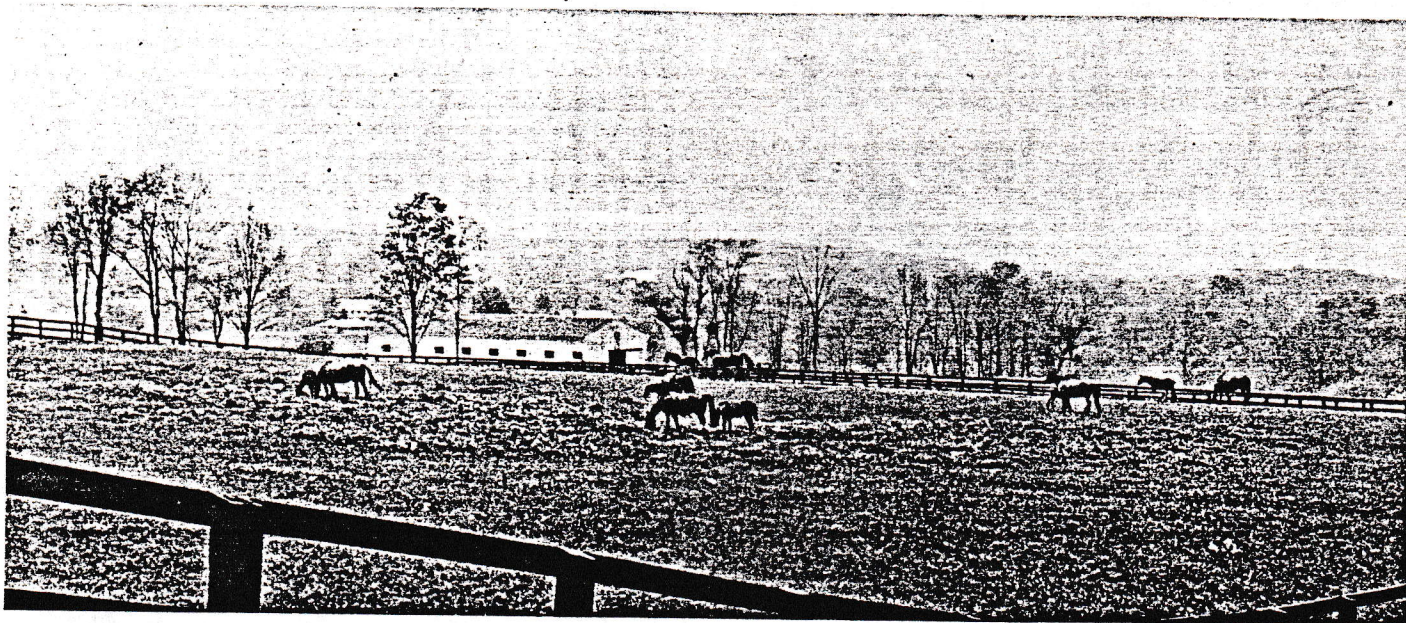


Photo by United States Trotting Association

The East Coast Indians were introduced to horses by the Spanish explorers at about the same time as the western Indians. However, they were farmers and trappers, and their needs for horses were quite different. Their society did not develop around the horse to the same extent that western society did. The horse was used by the East Coast Indians primarily as a pack animal to haul hides to the coast. Their horses were as fine as the western horses and were also of Spanish origin, although they were referred to as "Chickasaw" horses. These horses came from a series of Franciscan missions that were established in the Southeast (Georgia) at the same time that Juan de Onate was establishing his mission in the Southwest. Many of the early colonists bought "Chickasaw" horses from the Indians to use on their farms. These horses then provided a "Spanish" base in the "native" herds that were later used to breed the Quarter Horse, the American Saddle Horse and the Tennessee Walking Horse.

The Colonists along the Atlantic seaboard, the English in Virginia, the Dutch in New York, and the French in Quebec, also brought horses with them. The colonists subsequently imported more horses, but most of them came not from the Old World but from the horse-breeding farms established by the Spanish in the West Indies. The Spanish basis of the light horse stocks of the New World was well established in the Mustangs of the West, the "Chickasaw" and other Indian horses of the Southeast, and the mounts and farm horses of the colonists.

Horses were little used in colonial New England. The small, hilly, rocky fields were better suited to oxen than to draft horses, and the Puritan ethic militated against the expense and frivolity of keeping riding horses. Horse racing was socially unacceptable because it was too closely associated with the land gentry in England, whom the colonists had sought to escape by coming to America. However, horse breeding became a popular enterprise later on as the market developed for riding horses, for coach

horses, and for work horses in the cities and in the West Indies, where they were used on the sugar plantations. The development of harness racing created a further strain on the colonists' puritanical values, as a demand was created for some of New England's fast strains of harness horses.

As the colonies developed, the farmers in New York and Pennsylvania had need for heavy horses that would not only till the soil but haul their products to the markets in Philadelphia and New York City. The native horses were a little small and too light for this rugged work, so the colonists naturally turned to the horses of their homelands and imported the Belgian, Percheron, Shire, and Clydesdale breeds. These "draft" stallions were mated to the "native" mares, and although many fine, heavy, coach and wagon horses were produced for use in America's developing cities, no American breed of draft or coach horse was ever developed.

All breeds have one thing in common: they are not intrinsically pure. The usual definition of a breed is that it is a group of animals that have certain distinguishable characteristics, such as function, conformation, and color. Breed registries depend on correct identification to ensure accuracy of ancestry and to establish standards for the fair exchange of horses between buyer and seller.

There are many interrelationships in the ancestry of the American breeds. Breeds evolved as a result of geographical isolation and selection for a specific purpose. At some point, the desirable characteristics became sufficiently defined that a breed type developed, and finally a breed registry was formed. For example, the registry for the American Quarter Horse, a breed that traces its existence to colonial times, was not formed until 1940. The beautiful American breeds are all light horses that can in some way be traced back to the hardy, refined Spanish horses that populated the Western Hemisphere.

# LIGHT HORSES BY BREED

## AMERICAN QUARTER HORSE

Of the estimated 139,400 light horses in New York, the American Quarter Horse at 26,550 head was the most popular, and accounted for 19 percent of the light horses. Over 30 percent (8,000 head) are located in the Southeast area and over 16 percent (4,400 head) in the Western area. The Central reporting area ran a close third with 15 percent or 4,050 head.

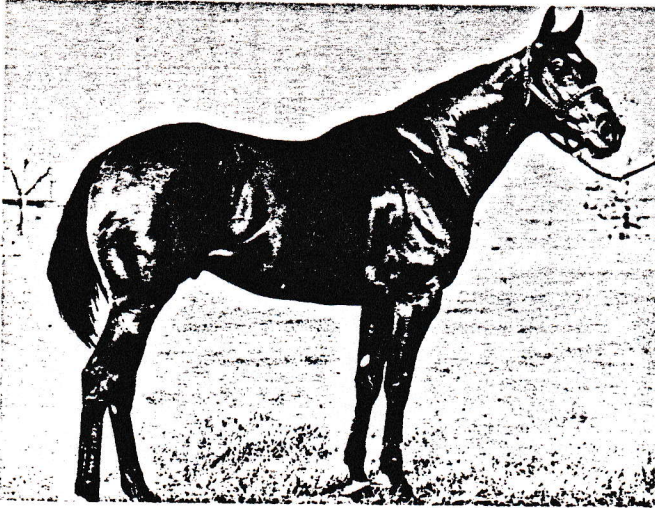


Photo by L. Dale Van Vleck

Admirers of the Quarter Horse claim it was the first breed developed in the United States, even before the Thoroughbred was developed, long before Paul Revere made his historic ride - on, it is said, a Quarter Horse. The quarter running horse (quarter of a mile) is said to have run in colonial America on the short, flat stretches of towns and villages. These horses probably would have developed from crosses with horses that had been brought to Florida earlier by the Spaniards. Whether this is accepted history or whether the development of the cow horse in the rugged cattle country of the West during the middle and late 1800's should be considered the beginning of the breed does not really matter to the many proud owners of the modern American Quarter Horse. Even if this version is not acceptable by all historians, there is general agreement that a Thoroughbred named Janus imported in 1752 had a lasting influence on the development of the Quarter Horse type.

Breeders of the Quarter Horse are somewhat divided as to the performance objectives of that breed. The increasing demand for and stakes in Quarter Horse racing have directed some to breed primarily for speed by increased introduction of Thoroughbred breeding. Other breeders are more interested in maintaining the image of the shorter-coupled, more muscular front and rear-ended cow horse, which has the dexterity and tenacity the rancher needs.

In recent years, the infusion of Thoroughbred blood for racing purposes has refined the short legged, heavily muscular Quarter Horse of the Old West. The generally accepted height limits for mature horses are 14.3 to 15.1 hands and the generally accepted weight limits are 1,100 to 1,300 pounds. Some animals may be over or under these limits. The stop watch is the true measure of the Quarter Horse. Color is of no particular importance except for personal preference. Animals with spots or marking that indicate Paint, Pinto, Appaloosa, or American Albino breeding are not eligible for registration. Dun, buckskin, and palo-

mino are acceptable. The American Quarter Horse Association located in Amarillo, Texas has registered over 1.25 million horses, making it the largest equine registry in the world.

Today's Quarter Horse excels in activities requiring quick bursts of speed and sharp turning and stopping ability, such as the Western-oriented roping, cutting, barrel racing, steer wrestling, and reining. The American Quarter Horse is equally at home being used for polo, fox hunting, eventing, etc. and is a favorite pleasure mount and trail horse under both English and Western tack.

## THOROUGHBRED

The Thoroughbred horse is the second most popular breed in New York. It's 23,800 head represents 17 percent of the light horses in the State with the primary concentration in the Southeast reporting district. Over 50 percent (12,100 head) of the State's Thoroughbreds are located in this area. Long Island area is second with 5,500 or 23 percent of the total while the Central area has 16 percent or 3,900 head.

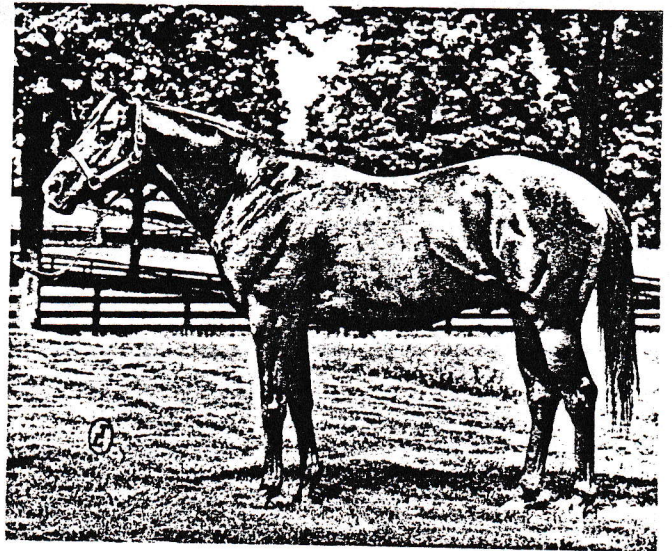


Photo by New York State Thoroughbred Breeding and Development Fund

Thoroughbred horses have been developed for speed at intermediate distances. No other breed can match the Thoroughbred at racing distances of 6 furlongs (3/4 mile) to 1 1/2 miles. In addition, Thoroughbreds have been popular as polo ponies, hunters, and jumpers, as well as for pleasure riding. For many years, Thoroughbreds and Half-Thoroughbreds were popular with the United States Cavalry. In fact, General George A. Custer was mounted on a Thoroughbred at the Little Big Horn River.

The Thoroughbred has provided foundation stock for many of the light horse breeds of the United States, including the Standardbred, the American Saddle Horse, the Morgan, and the Quarter Horse, which still accepts Half-Thoroughbreds.

The history of the Thoroughbred as a breed began in England. Native horses had been crossed with light horse mares imported from Spain, Turkey and Italy. In the late 1600's until 1750, Arabians, Turks, and Barbs (Oriental

sires as they were called) were imported for the purpose of increasing the speed of horses used in the popular sport of racing. Three of these stallions became most famous and eventually became the basis of the three stallion lines to which nearly all Thoroughbreds can be traced. Bulle Rock is traditionally regarded to be the first Thoroughbred imported to America in 1730.

The ideal Thoroughbred is difficult to describe. The oldest axiom in racing is "They run in all shapes and sizes." The most complete measure of the racing Thoroughbred is the stop watch. Performance under racing conditions is the essence of racing. A superior racer will have acceptable conformation, but superior conformation does not necessarily lead to adequate speed. Most Thoroughbreds, however, tend to have a long forearm and gaskin and display considerable length from the hip to the hock. They are noted for long, smooth muscling. The rear, or propelling, quarters are especially powerful. Thoroughbreds excel at the run or extended gallop but may seem awkward at the walk or trot. The usual range in size at racing condition is 15.1-16.2 hands and 900-1,150 pounds. The modern Thoroughbred is nearly 2 hands taller than the foundation Thoroughbreds of about 1750. They are performance horses, so their color is not important. Colors and markings are recorded at registration, however, for purposes of identification. The Jockey Club, the registration authority in the United States with offices in New York City, New York, recognizes black, dark bay or brown, bay, chestnut, gray, and roan. The description of roan is really a nonblack gray, not a true roan. White Thoroughbreds are generally gray early in life but with age many turn white.

Today's predominate use of the Thoroughbred is for racing, both on the flat track and in steeplechasing. The conformation and style of movement in the breed are also qualities that make the animal useful in the hunt field; as a show hunter; sporting event; show jumping; dressage and polo.

## STANDARD BRED

Standardbred horses numbered 22,250 or 16 percent of the total light horses in the State. Once again the Southeast reporting area with 7,000 head dominated the distribution of animals throughout the State with 32 percent of the total. Slightly less than a fourth (5,300 head) of this breed is in the Western district and 16 percent or 3,600 are in the Central reporting area.

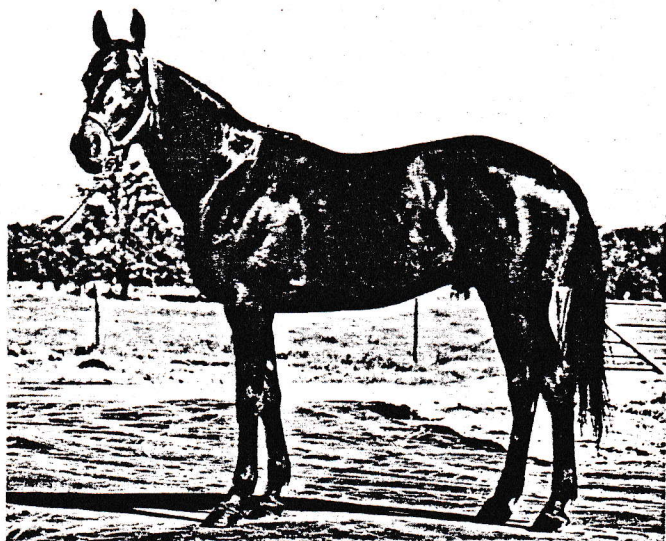


Photo by Harness Horse Breeders of New York Inc.

The Standardbred, once called the American Trotting Horse, was developed from Thoroughbred, Norfolk Trotter, Barb, Morgan, and Canadian pacing ancestors. The name Standardbred comes from the practice that began in the 1800's of registering horses that trotted or paced the mile in less than a "standard" time. Over the years, since Yankee first trotted the mile under saddle in less than 3 minutes at the Harlem race track in 1806, the standard has been lowered. The standards first officially set in 1879 were 2:30 for trotters and 2:25 for pacers. The current standard is 2:20 for 2-year-olds and 2:15 for older horses, although horses are now only rarely registered on the basis of these standards.

Many breeders trace the Standardbred to Messenger, a gray Thoroughbred imported to Philadelphia from England in 1788. Hambletonian, great-grandson of Messenger, is perhaps the greatest name in the history of the breed; approximately 99 percent of all Standardbreds trace to him. Part of his predominance may be due to his prolificacy - 1,331 living foals. His sons founded the four predominant sire lines of the present-day breed - The Direct and The Abbe lines of pacers and The Axworthy and Peter the Great lines of trotters - although Hambletonian himself never raced. The imported Bellfounder, which had Norfolk Trotting ancestry, was the maternal grandsire of Hambletonian. Tom Hal was the founder of a Canadian pacing line that, along with other Thoroughbreds, Morgans, and native horses, contributed to the development of the breed.

Early breeders favored trotters and did not appreciate pacers. Now, however, except for some of the classic races, pacers predominate at most pari-mutuel betting tracks. Usually 8 of 9 races on the card are for pacers, which are, on the average, only marginally faster but do not race with trotters. Genetic factors and, more importantly, training and shoeing methods, are used to determine or to change the gait. A few horses have the ability to race well at either the trot or the pace - in separate races, of course. The trot is a two-beat diagonal gait. The opposite front and rear feet push off and land at the same time while the pace is a two-beat lateral gait, with the front and hind feet on the same side start and land together.

The measure of performance of the Standardbred is speed. Conformation may contribute to freedom from injury and breakdown, but it is not primarily important. The body conformation of the Standardbred is similar to that of the Thoroughbred, although the Standardbred is generally smaller. The range in height is often 14.2-16.2 hands; the range in weight is 850 to 1,150 pounds when the horse is in racing condition. Bay is the predominant color, but chestnut, brown, black, and, of course gray, are also seen. There seems to be no color discrimination if the horse is fast.

The present registry for Standardbreds is the U. S. Trotting Association in Columbus, Ohio.

Today's Standardbred who was historically known as a Roadster or Road Horse pulls the common sulky in racing events throughout the country or a four wheeled road buggy that adds color and excitement to many horse shows.

## APPALOOSA

The fourth most popular breed of light horse in New York is the Appaloosa with 10,100 head (7 percent of the State's total). Over 25 percent or 2,600 head are located in the Western district and 1,350 in the Southeast reporting district. The Northern and Eastern areas each have 1,300 or about 13 percent of the total.



## MORGAN

With less than 5 percent of the State's total light horses, Morgans totaled 6,100 head and placed fifth in popularity. Well over a third (2,200) are located in the Eastern reporting district. The Central district had 1,300 or 21 percent of the Morgans in the State. Less than 15 percent or 900 are located in the Southeast district.

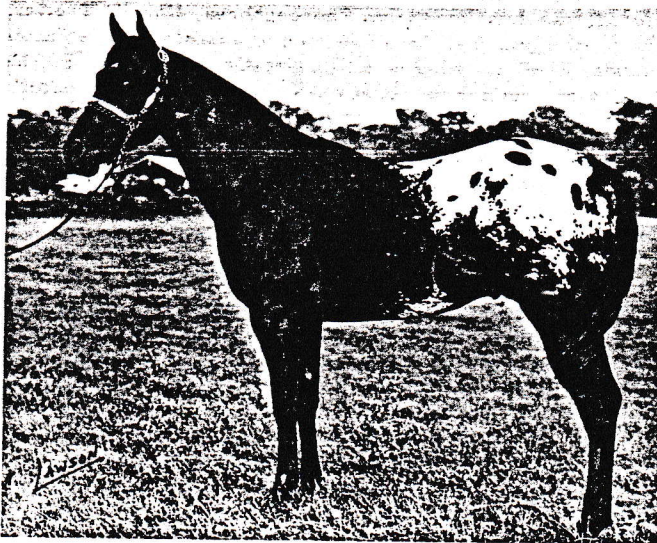


Photo by L. Dale Van Vleck

The Palouse River country of the northwestern United States has given its name to this distinctive breed of horse. The name "Appaloosa" was derived from the slurring of "A Palouse" to form Apaloose, which later became Apaloosie and is now Appaloosa (ap-pah-loose-ah).

Horses with the colorful characteristics of the Appaloosa appear in Chinese art dating from 500 B. C. and in Persian and European art of the fourteenth century.

Spanish horses that were brought to Mexico about 1600 apparently formed the basis for the present-day Appaloosa. The Spanish horses and their descendants spread northward and, by 1730, had been acquired by the Nez Perce' tribe in the Palouse country. Because of their colorful markings and riding characteristics (endurance, surefootedness), the Nez Perce' bred the Appaloosa for rugged mountain traveling for the next 100 years. As a type, the Appaloosa nearly disappeared after the surrender of Chief Joseph and the Nez Perce' to the United States Army in the Bear Paw Mountains of Montana in 1877.

The Appaloosa Horse Club currently located in Moscow, Idaho was formed in 1938 to preserve, improve, and standardize the spotted horse. Three distinctive characteristics are required of all Appaloosas: (1) the eye is encircled with white like the human eye; (2) the skin is mottled irregularly with black and white (parti-colored), particularly around the nostrils and genitalia; and (3) the hooves are narrowly striped vertically in black and white. Color patterns vary widely and because the genetics of the color patterns is not well understood, standardizing the breed and even predicting the results of a mating are difficult. The color patterns may not be apparent at birth and may change with age. The mane and tail of most Appaloosas are usually sparse. This is called the rat-tailed condition. Appaloosas must exceed 14 hands in height by the time they are five years old. Horses with pony or draft horse breeding are not eligible for registration. In an attempt to protect the distinctive color pattern, horses with Albino, Pinto, or Paint breeding or markings are also excluded, as are horses with excessive white or misplaced spots.

Today this breed is a general purpose riding horse that can be used for pleasure, parade, rodeo, western show and racing. One of the most striking and outstanding features of a show or parade is the costuming in which the riders don the dress of the Nez Perce' and the horses are tacked in lavish Indian equipment.

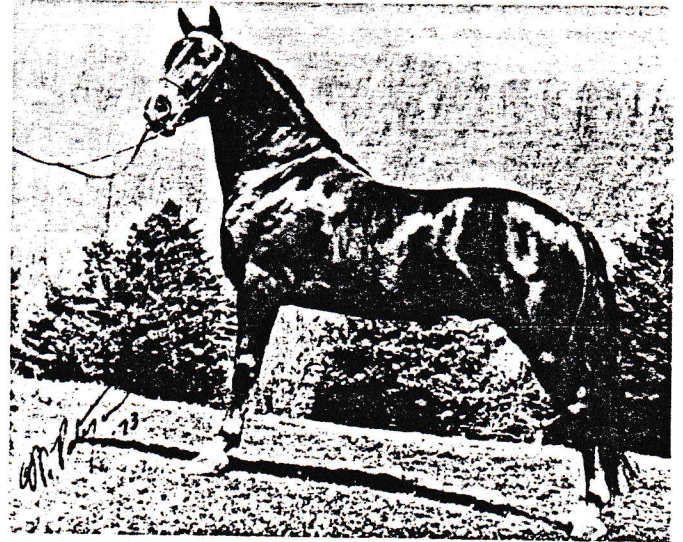


Photo by L. Dale Van Vleck

Morgan is the only breed named after a horse. No other horse has such a distinction as Justin Morgan, the foundation sire of the Morgan Horse. Actually, the stallion was called Figure as a foal, and took his adult name from its owner (a Massachusetts schoolteacher), as was the custom in the late 1700's. He followed Justin Morgan from Massachusetts (where the stallion was foaled) through and around Vermont.

Justin Morgan, the horse, became famous because of his outstanding progeny and because of his ability, according to stories that still persist, to outrun, outpull, outwalk, and outtrot all competition. Horses with Morgan blood became popular before 1850 for their all-purpose ability -- on the farm, at the trot, and under the saddle. After 1850, the developing Standardbred breed, to which Morgan Horses contributed substantially, replaced the Morgan on the race tracks. Later, motor vehicles replaced the Morgan on the farms and roads. Since then the Morgan has been used primarily for pleasure riding and more recently as a show horse.

The ancestry of Justin Morgan is not clear, although it is believed that he was sired by a Thoroughbred out of a mare of Arabian breeding. Since Thoroughbreds of that time were closely related to Arabians, Justin Morgan had and passed on many characteristics of the Arabian -- especially the refined head and raised tail when on the move.

Justin Morgan's progeny and grandprogeny were used in establishing the Standardbred and American Saddle Horse breeds. Many Quarter Horses also trace to Morgan breeding.

The American Morgan Horse Association, as it is now named, located in Hamilton, New York, registers only horses that have registered sires and dams. There must be no white above the knee or hock except on the face. Horses with no pigment in the iris are also ineligible. All colors are acceptable except white, spotted horses and those with Appaloosa patterns. Palominos, duns, and buckskins are

acceptable. The dark liver or black chestnut color is found more often in the Morgan than in any other breed.

The Morgan today is popular for riding and for shows. The size has increased, from Justin Morgan's 14 hands and less than 1,000 pounds to a usual range of 14.1 to 15.1 hands and 1,000-1,200 pounds.

The breed is distinctive for its stamina and vigor, personality and eagerness and strong natural way of moving.

## ARABIAN

The Arabian breed constituted over 4 percent of the total light horses or 6,000 head. Over 21 percent (1,300 head) are located in the Northern district with the Western and Central areas reporting 1,050 and 1,000 respectively. Eight hundred and fifty are located in the Southeast area and 800 in the Southwest area.

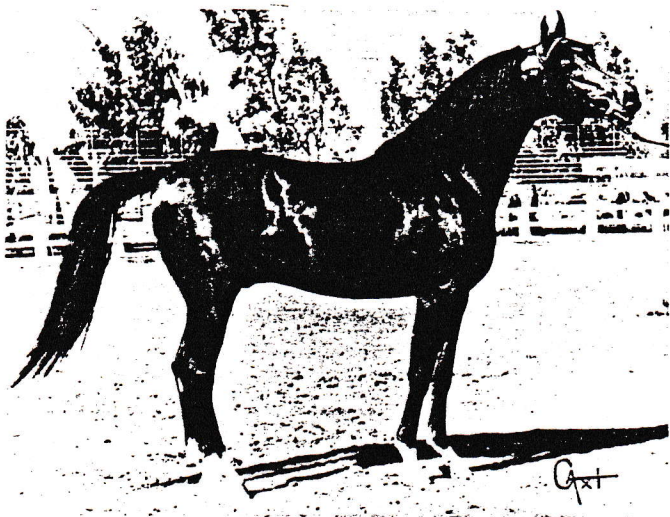


Photo by L. Dale Van Vleck

No breed of horse has influenced the development of breeds of light horses in America more than has the Thoroughbred, but the Thoroughbred was developed largely from the Arabian. Although the history and origin of the Arabian horse are not always agreed upon even by experts, there is no question that the Arabs have been breeding and selecting for improved Arabian horses for 2,000 years or more. The stock for this selection may have existed for as long as 3,000 years in the Mideast or northern Africa before Arabian horses were first bred on the deserts of the Arabian peninsula.

Some historians believe that the Barb horses of northern Africa (the Barbary States) were ancestors of the Arabian, whereas others believe the Arabians were used in development of the Barb. In any event, the Arabians, Barbs and Turkmenese horses all developed in the same general region of the world. Most of the so-called hot-blooded horses of the world can be traced to these three ancestors. The first Arabians apparently were imported to America shortly before the Revolutionary War, but the major expansion of the breed occurred about 1906 when Homer Davenport imported 27 horses from the deserts of Arabia.

The Arabian is a general-purpose, light horse with an unsurpassed reputation for endurance. Arabians generally stand 14.1-15.1 hands at the withers and weigh between 800 and 1,000 pounds -- somewhat smaller than most gen-

eral-purpose riding horses. Naturally, some horses do not fall within these limits.

The head of the ideal Arabian is distinctive: relatively small, dished, and triangular with a small muzzle, wide-set eyes, and a chiseled appearance. The neck is also distinctive; it is long and highly arched, and set high on the shoulder. The back is generally short and straight. The croup is long and comparatively flat to the tail, possibly because some Arabians have 2 fewer caudal (tail) vertebrae than other breeds. The tail is often arched above croup level while the horse is walking or trotting.

The Arabian horse is not a color breed, thus markings and color are not all that important, except that the body spot has been discriminated against in the past. Recently the body spot is considered more than likely a sign of the breeds antiquity.

The Arabian Horse Registry of America located in Englewood, Colorado was established in 1908.

While the Arabian is a classically beautiful animal, used as a model in art and pleasing to almost any eye regardless of breed preference, this horse is also an extremely versatile riding and driving horse that is capable of performing whatever is asked of it. Their remarkable endurance has made them a standout in long distance trail rides.

## AMERICAN SADDLE HORSE

American Saddle Horses accounted for less than 4 percent (4,700 head) of the State's light horses. The Southeast area had 1,500 or 32 percent of the total while the Southern area reported 29 percent (1,350 head).

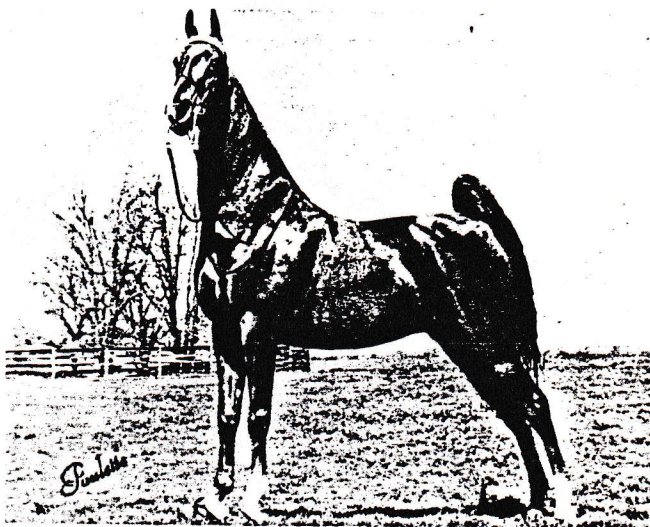


Photo by L. Dale Van Vleck

The American Saddle Horse was first bred in the United States, and the type evolved as the needs of the country changed. The residents of the bluegrass region of Kentucky and areas of Tennessee, Virginia, West Virginia, and (later) Missouri desired an easy-riding, general-purpose type of horse for the plantations and hilly grazing areas. The first name given to horses of this type was the Kentucky Saddle Horse. This easy-gaited saddle horse developed from Thoroughbred, Canadian Pacer, American trotter, Morgan, Arabian, and other ancestors. In 1901 the American Saddle Horse Association listed 10 foundation sires, but in 1908 the list was reduced to the Thoroughbred stallion, Denmark - undoubtedly the most important. Early develop-

ment of the breed preceded Denmark, although the era of its popularity was after the Civil War.

As needs changed, the American Saddle Horse developed into what has been called the peacock of the horse world. Breeding has been largely for horse show purposes. The Saddlebred is in demand for three- and five-gaited classes, for fine harness, and for combination saddle and harness classes, although many of these horses are also used for pleasure riding.

The show class Saddlebred has emphasized the flashy and exaggerated but control gaits of three or five. The breed is trained to perform each gait distinctly with considerable action, to go without hesitation from one gait to the other, and to change lead at the canter from left to right on command. The basic three gaits are the walk, trot, and canter.

Additional training and ability are required for the unnatural gaits of the five-gaited horse. The slow gait is a rich, high stepping four-beat gait while the rack is a fast, flashy, four-beat gait (sometimes called the single foot) that is free from any pacing motion.

An ideal American Saddlebred has a well-shaped head, small alert ears, large eyes set well apart, a good muzzle and wide nostrils. Its long neck is nicely arched with a fine small throttle. It has sharp withers, sloping shoulders and a short back. The croup is level, with the tail coming out high. The hind quarters are well muscled to the hocks. Legs are straight with long sloping pasterns provid-

ing the springiness so necessary for a smooth comfortable easy ride. It has good sound hoofs, open at the heels. Average height is 15 to 16 hands and the weight from 1,000 to 1,200 pounds. Dark colors are preferred but the coloring can be bay, brown, black, chestnut, gray, or roan. Large, white markings are avoided by many breeders and trainers. Registry for the American Saddle Horse is in Louisville, Kentucky.

Today this breed, in addition to its fine show, is equally at home on the trail or in other equestrian sporting events.

## OTHER BREEDS

Other breeds in the State which included Tennessee Walking Horse, Palomino, Pinto and Paints plus several unnamed animals totaled 2,450 animals. The Central area reported 550 head while the Western and Southeast districts each reported 500 head.

## CROSSBRED AND UNKNOWN

Crossbred horses and those whose breeding was unknown totaled 37,450 or 27 percent of the total light horse population. Nearly 35 percent (13,000) of the animals were reported in the Southeast reporting district. The Central area reported 7,300 or 20 percent of the State's total while the Western district accounted for 5,300 head (14 percent).

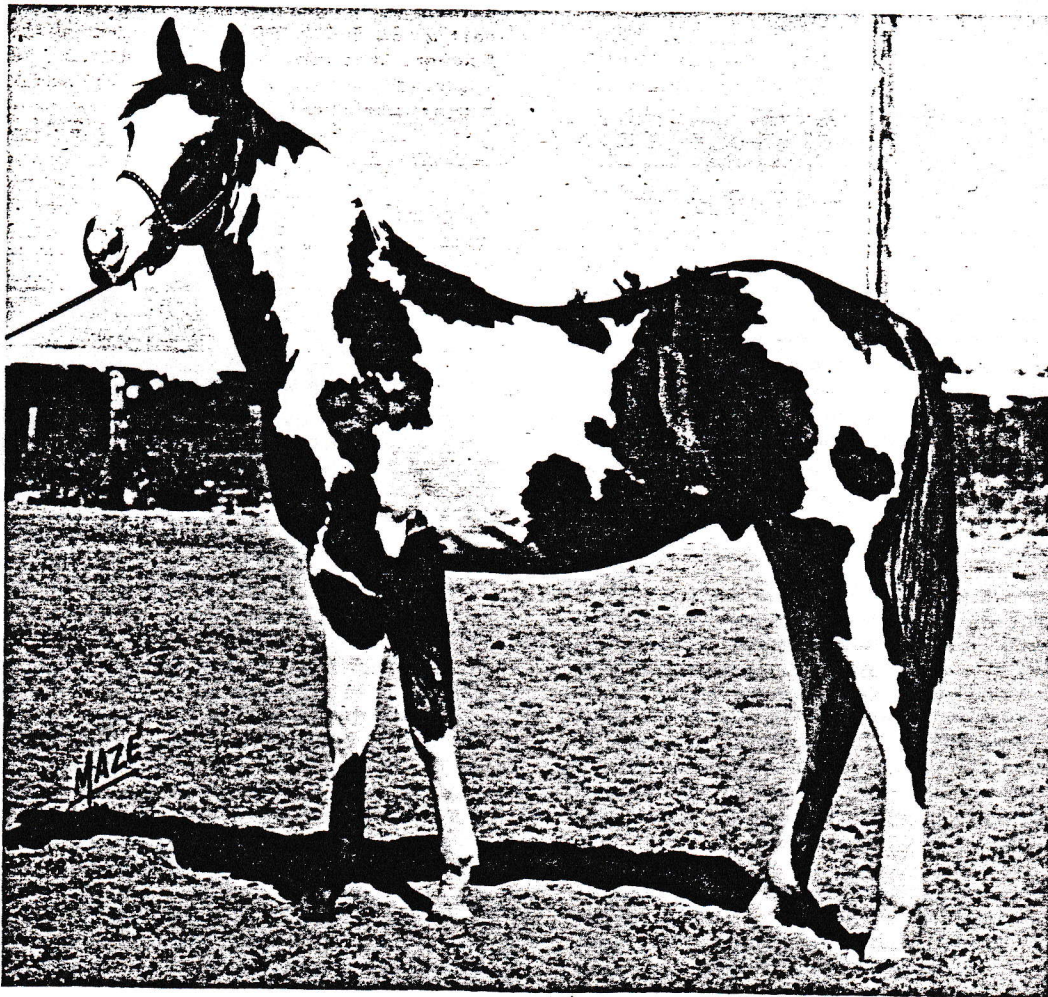


Photo by L. Dale Van Vleck

**Table 2. LIGHT HORSES BY BREED IN NEW YORK, 1978**

District	Breeds										
	All Equine	All Light Horses	American Saddle Horse	American Quarter Horse	Appaloosa	Arabian	Morgan	Standardbred	Thoroughbred	Cross-breds	Other Breeds
	<u>Number</u>										
Northern	10,100	5,700	*	300	1,300	1,300	100	800	50	1,800	50
Northeast	5,500	3,400	400	750	500	50	350	300	50	1,000	*
Western	29,150	23,900	250	4,400	2,600	1,050	600	5,300	3,900	5,300	500
Central	28,800	20,500	150	4,050	1,200	1,000	1,300	3,600	1,350	7,300	550
Eastern	13,000	11,200	500	2,200	1,300	250	2,200	1,850	400	2,400	100
Southwest	13,950	7,900	100	2,050	900	800	200	1,000	100	2,400	350
Southern	13,250	8,000	1,350	2,400	700	400	450	250	350	1,800	300
Southeast	52,000	45,200	1,500	8,000	1,350	850	900	7,000	12,100	13,000	500
Long Island	14,250	13,600	450	2,400	250	300	*	2,150	5,500	2,450	100
STATE	180,000	139,400	4,700	26,550	10,100	6,000	6,100	22,250	23,800	37,450	2,450
% of State Total		100.0	3.4	19.0	7.2	4.3	4.4	16.0	17.1	26.9	1.7

\* Less than 50 head.

### LIGHT HORSES BY BREED

Number

37,450

CROSSBRED

26.9%

26,550

AMERICAN QUARTER HORSE

19.0%

23,800

THOROUGHBRED

17.1%

22,250

STANDARD BRED

16.0%

10,100

APPALOOSA

7.2%

6,100

MORGAN

4.4%

6,000

ARABIAN

4.3%

4,700

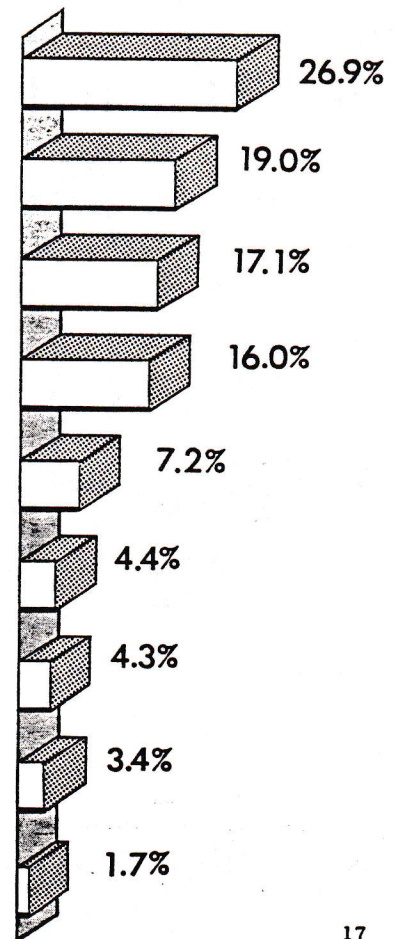
AMERICAN SADDLE HORSE

3.4%

2,450

OTHER BREEDS

1.7%



# PONIES BY BREED

Historically, ponies developed under adverse climatic conditions, promiscuous breeding and privation. For generations ponies were accustomed to picking their way up and down stony precipitous hillsides. Their feet and legs consequently are of the very best, and they are remarkably sure-footed. In the pony, unsoundness of wind or limb is almost unknown. Their hardiness and intelligence have been transmitted to the generations born in domestication and their great stamina is evidenced by long life.

Ponies in this country have been used chiefly for children. In Europe, in England particularly, they served a greater variety of purposes. Some worked in coal mines, but a great many more were used above ground. Green grocers, fish mongers, market men, small merchants, all employed them for delivery purposes. Country gentlemen, doctors, land agents, in fact all persons having occasion to travel, depended upon ponies a great deal.

## SHETLAND

Shetland ponies, the most popular pony breed in New York, totaled 10,400 or 32 percent of the State's total. The Central area reported 2,500 head (24 percent) of the total. Four of the remaining eight districts all report relatively close counts with the Central area at 1,500; both the Southwest and Southeast areas at 1,450; and the Western district at 1,350.

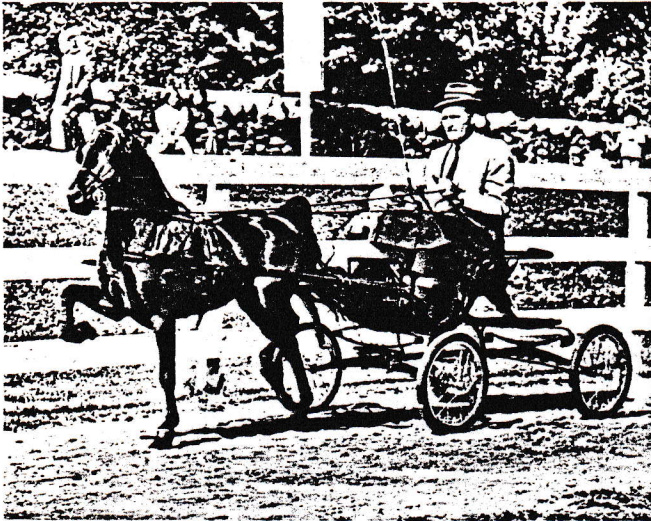


Photo by L. Dale Van Vleck

When most people think of a pony, they have in mind the Shetland. The name "Shetland" derives from an old Norse word meaning "highland." These ponies were developed on the Shetland Islands approximately 100 miles north of Scotland and 350 miles from the Arctic Circle. This provided a harsh, rugged environment for the development of a hardy breed of ponies that began before the Norsemen settled the islands about 850 A.D. The shaggy coat worn by Shetlands in winter months and by some foals until they are 2 years of age must have developed to withstand the rigors of the North Sea winters and storms. The native pony of the Shetland Islands was a miniature draft horse, as contrasted with the refined American Shetland. They became popular in England and Scotland for work in the mines because of their strength and small size.

The Shetland came with the English settlers to the United States, as did the Thoroughbred. The Arabian and Barb breeding, by way of the Hackney, as evidenced in the modern American Shetland, apparently resulted from crosses that were made in the 1880's. Other than those crosses, the Shetland has been a relatively true-breeding breed - at first because of the isolation of its native islands, and later because of the desire to maintain a small children's pony.

The modern American type of Shetland is the result of selection from the draft or "Island" types that were imported to America. The types have diverged so much that today the native Shetland can no longer be registered in the American Stud Book. Many nonregistered Shetlands, however, show more of their ancestral type than do the registered show class Shetlands.

The American Shetland Pony Club, which is currently located in Fowler, Indiana, was organized in 1888. Recently the annual registration has averaged about 2,000 head. To increase the popularity of this cyclically popular breed, a new Division B for registration of crossbred Shetlands having at least 50 percent registered Shetland breeding was approved. Division A is retained for animals with registered Shetland parents.

The Official Show Rules describe the Shetland pony in the following text. Conformation should be that of a strong, attractive, versatile pony, blending the original Shetland type with refinement and quality resulting from American care and selective breeding. The barrel should be well rounded, back short and level, with flat croup. The head should be carried high and on a well-arched neck, and should be symmetrical and proportionate to the body, with width between prominent eyes, a fine jaw, short, sharp and erect ears, small muzzle with flaring nostrils and a refined throat latch. The pony shall have a full mane and tail. The pony's structure should be strong with refinement, with high withers, sloping shoulders, flat bonded, muscular legs (not cow or sickle hocked), strong springy pasterns and good strong serviceable feet.

Shetland ponies come in all colors. Black, dark brown, bay, and chestnut predominate, especially for the show ring, where white markings have not recently been preferred although color fads change. Spotted ponies are popular for children's mounts. A color unique to Shetlands is the silver dapple - a dappled chestnut with silver or white mane and tail. Another unique color is the light bay with only a few black hairs intermingled in a flaxen mane and tail. Black points on the legs are nearly absent.

The show ring accommodates the versatile Shetland in breeding and harness classes. As with most pony breeds, the classes are divided according to height. The dividing line of 43 inches appears to nearly equalize the number in the "over" and "under" classes.

## WELSH

Even though they account for less than 15 percent (4,500 head) of the ponies in New York, the Welsh breed is second only to the Shetland in popularity. One thousand are located in the Northeast reporting area. The Southwest district has 800 while the Northern, Northeast, and Central areas each have 700 head.

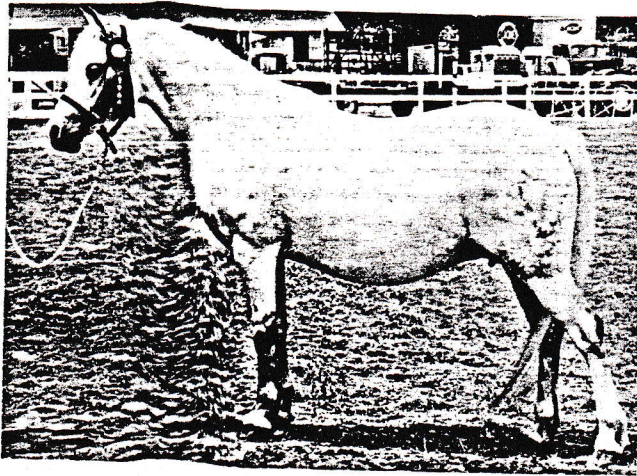


Photo by L. Dale Van Vleck,

The ancestors of the Welsh Mountain Pony developed in the severe terrain of Wales even before the Roman legions invaded the British Isles. In the early 1800's, Thoroughbred, Arabian, and Hackney blood was incorporated. In the late 1800's, some Welsh Ponies were imported to the United States, where the Welsh Pony and Cob Society was incorporated in 1906. (The Welsh Cob is a larger version of the Welsh Pony.) The breed expanded for some time, then declined. There were virtually no registrations during the depression of the 1930's. A renaming and reorganization took place in 1946, and "Cob" was dropped from the society's name, because no Cobs had been registered in the United States. Today the Welsh Pony Society of America is located at Winchester, Virginia. Most Welsh Ponies trace to importation from England after 1947.

The Welsh Pony is intermediate between a Shetland and most riding horses and is useful for children who have outgrown ponies of Shetland size. Welsh Ponies are also used as hunters for children. Welsh Ponies registered in Division A cannot exceed 50 inches; taller ponies are registered in Division B but cannot exceed 58 inches.

Rather than show the Welsh Pony as a "fitted," high-stepping pony, as are the Shetland and Hackney, Welsh breeders have adopted a more natural way of presentation. In the formal driving classes, fine harness equipment is used but without artificial appliances.

A frequent color of the Welsh is gray, especially in England. Any color is acceptable, but spotted patterns cannot be registered.

The Welsh has been frequently crossed with larger riding-horse breeds to produce ponies whose height ranges between 13 and 14 hands. The Halfbred and Crossbred Welsh Registry (part of the Welsh Pony Society of America) was formed in 1959 to record animals and to protect buyers and sellers. A Halfbred Welsh has one registered Welsh parent and an unregistered parent of any other breed or combination of breeds. A Crossbred Welsh has registered parents, one Welsh and the other of another breed. There are no color or height limitations.

## OTHER BREEDS

Other pony breeds in New York totaled 1,100 head which primarily consisted of Ponies of America (POA) and Connemara breeds. Nearly half of these animals are located in Western and Central areas combined.

## CROSSBRED AND UNKNOWN

Over 50 percent or 17,000 head of the reported ponies are of crossbred or unknown breeding. The Southeast reporting area accounted for 4,100 head which is slightly less than 25 percent of the State's total. About 20 percent or 3,250 head are located in the Central area. The Western and Southwest areas reported 2,550 and 2,450 head, respectively. Seventeen hundred are located in the Northern district.



Photo by L. Dale Van Vleck

**Table 3. PONIES BY BREED IN NEW YORK, 1978**

District	Breeds					
	All Equine	All Ponies	Shetland	Welsh	Crossbreds	Other Breeds
	<u>Number</u>					
Northern	10,100	3,150	600	700	1,700	150
Northeast	5,500	2,000	550	1,000	400	50
Western	29,150	4,800	1,350	700	2,550	200
Central	28,800	6,700	2,500	700	3,250	250
Eastern	13,000	1,600	900	200	450	50
Southwest	13,950	4,800	1,450	800	2,450	100
Southern	13,250	3,450	1,500	150	1,650	150
Southeast	52,000	5,900	1,450	200	4,100	150
Long Island	14,250	600	100	50	450	*
STATE	180,000	33,000	10,400	4,500	17,000	1,100
% of State Total		100.0	31.5	13.7	51.5	3.3

\* Less than 50 head.

### PONIES BY BREED

Number

17,000

10,400

4,500

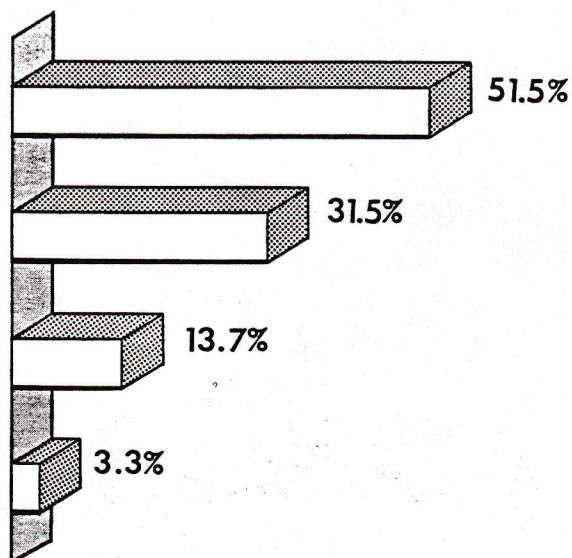
1,100

CROSSBREDS

SHETLAND

WELSH

OTHER BREEDS



# DRAFT HORSES BY BREED

Draft horses in the State were estimated at 5,400 or 3 percent of the total equine population.

Descendants of the "Great Horse," the horse of knights in armor of the Middle Ages, make up the five major draft breeds in the United States. These breeds all developed in northern Europe -- Scotland, England, France, and Belgium. All are named for their regions of origin: the Percheron from La Perche, an ancient district south of Normandy, France; the Belgian, a descendant of the great horse of Flanders; the Clydesdale from the Clyde River area known as Clydesdale in Scotland; the Shire, named for the English areas of Lincolnshire and Cambridgeshire; and the Suffolk from the agricultural county of Suffolk, also in England.

These horses, so frequently described in history and legend, developed into heavy-carriage, draft, and farming horses. Although their early history is obscure, the Percheron is thought to be the only one of these so-called cold-blooded horses to have had an infusion of Arab and Barb (hot-blooded) ancestry, a legacy of the Moorish invasion of Spain and western France in the early eighth century.

Nearly all the draft breeds are large and heavily muscled; they stand approximately 16-17 hands and weigh 1,600-2,200 pounds depending on sex, age, and condition.

## BELGIAN

The Belgian totaling 2,700 head (50 percent of the State's total) is the most popular breed in the State.

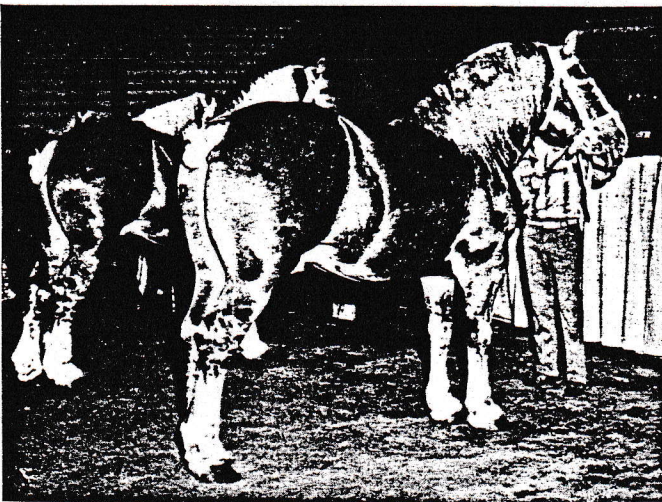


Photo by L. Dale Van Vleck

From 1910 through the 1930's, the Belgian - the sorrels and roans - surpassed the blacks and grays of the Percheron in popularity among American farmers. The predominant color soon became sorrel (many light horse breeders call it chestnut) with white mane and tail. The lighter shades are known as blonde sorrels. The characteristics of the Belgian suited the needs of the American farmer, and thus Belgian stallions were much in demand for crossing with native draft-type horses and particularly for crossing with Percheron mares. The uniformity of color of Belgians was popular and they were known for ease of

management. The Belgian has been distinguished in pulling contests and is very quiet and docile, but is somewhat slow-motioned and does not show much high-leg action. The influence of the imported roan stallion, Farceur, provided more action and quality (that is, better body and leg conformation).

The origin of the Belgian Draft Horse Corporation of America in Wabash, Indiana traces back to 1887. The current name was adopted in 1937. In recent years, more Belgians have been registered each year than all other draft breeds combined.

## PERCHERON

New York's Percheron population totaled 900 head slightly over 15 percent of the State's draft horse estimate.

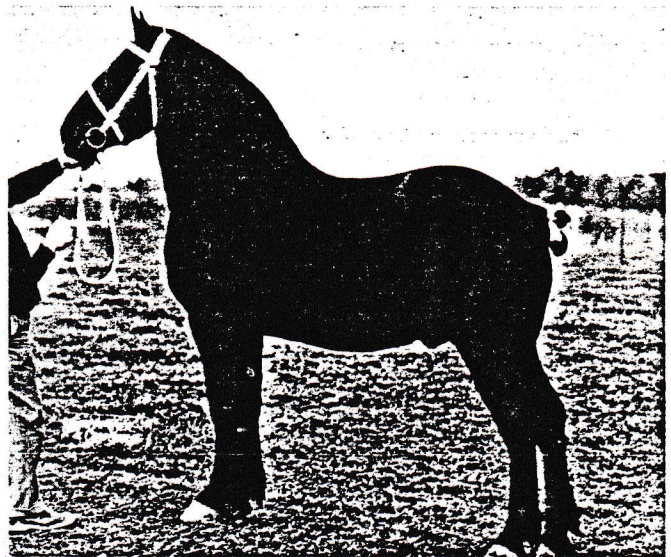


Photo by L. Dale Van Vleck

Percherons are known to have been imported to the United States in 1839. After 1851, imports were numerous as the Percheron became the most popular among the draft breeds.

The forerunner of the Percheron Horse Association of America currently located in Belmont, Ohio was first organized in 1876. Since then approximately 250,000 Percherons have been registered - more than all the other draft breeds combined. More Percherons were registered annually than any other draft breed until the Belgian became popular in the 1920's.

The Percheron is known as the breed of blacks and grays because approximately half are black and half are gray. Other colors are known, and white markings are common although not extensive.

Despite its immense size, the Percheron is active and light on its feet. It displays considerable knee action and a bold trot, both of which make it a popular horse in draft horse shows. Its popularity as a draft horse was due to its speed at the walk and the lack of feathering about the fetlock.



## CLYDESDALE

Less than 5 percent (250 head) of the draft horses in New York in 1978 were Clydesdales.

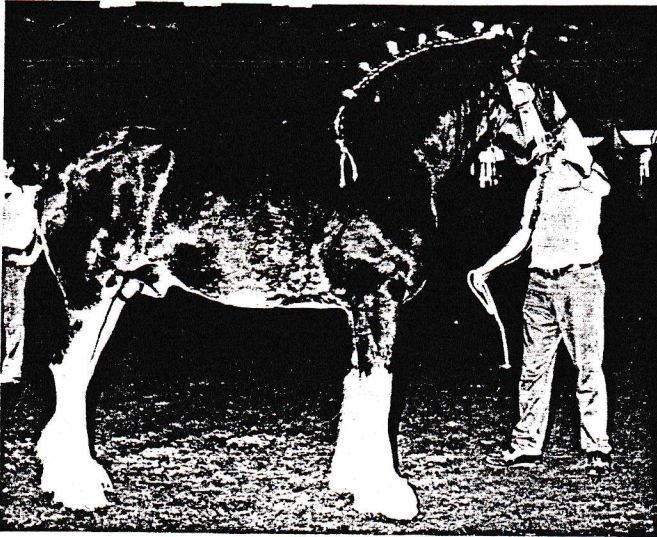


Photo by L. Dale Van Vleck

The advertising (including television commercials) of the Budweiser brewery and other companies having six and eight horse hitches make the Clydesdale one of the most well known of American draft horses. The extensive white

face and leg markings, together with the "feather" (long, silky hair on the lower legs), which creates a bell-bottomed effect, give the Clydesdale a unique appearance to go with the noted action of the breed - long, springy strides with extreme flexion of the knees and hocks.

The Clydesdale is somewhat lighter on the average than the other breeds although it is just as tall. The bones of these horses are cleaner and flatter than those of other breeds. Clydesdales are considered more nervous than the other draft breeds and were too difficult for most farmers to handle. The Clydesdale Breeders of U. S. is located in Pecatonica, Illinois.

## OTHER BREEDS

Other breeds of draft horses were estimated at 100 head and were primarily Shire and Suffolk.

## CROSSBRED AND UNKNOWN

Crossbred and horses of unknown breeding origin totaled 1,450 head or just over 25 percent of the total draft horses in New York.

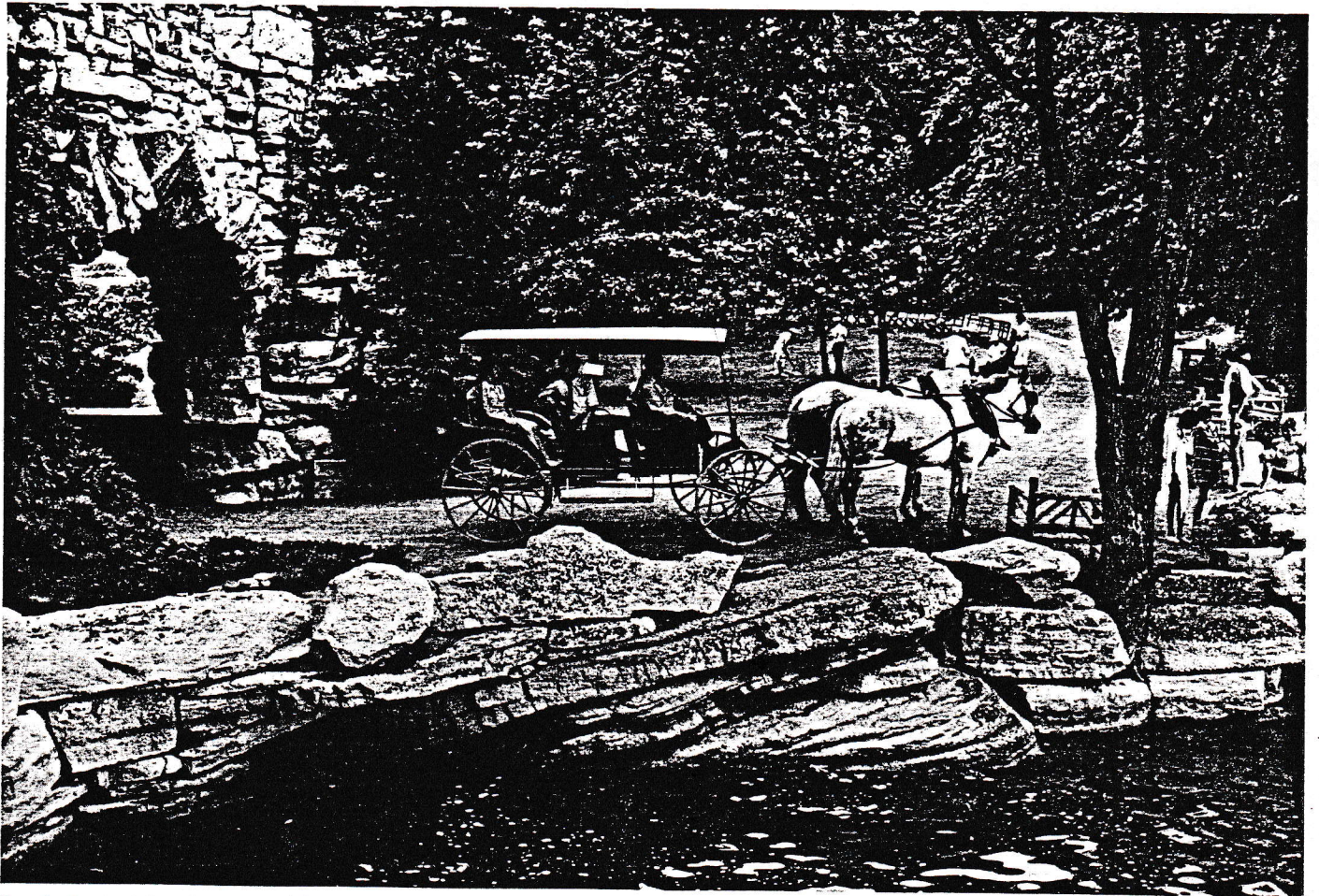
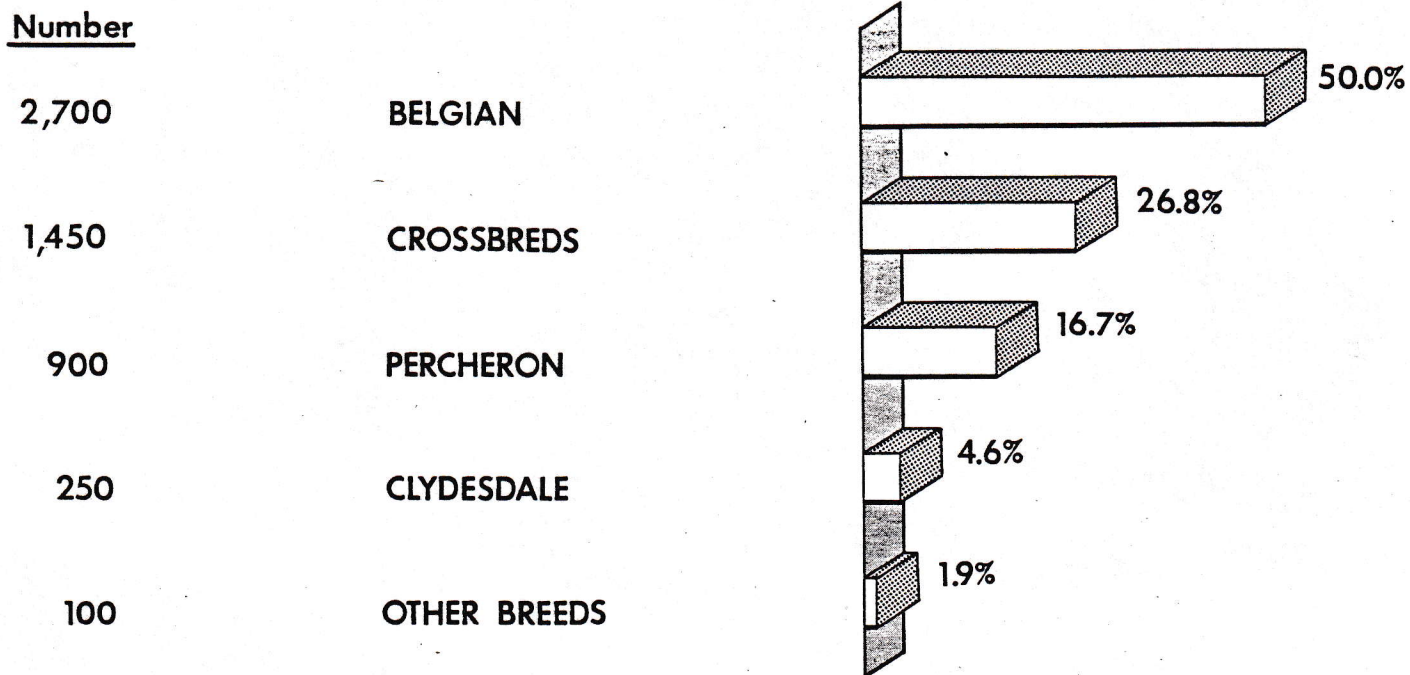


Photo by New York State Department of Commerce

**Table 4. DRAFT HORSES BY BREED IN NEW YORK, 1978**

	Breeds						
	All Equine	All Draft Horses	Belgian	Clydesdale	Percheron	Crossbreds	Other Breeds
STATE	180,000	5,400	2,700	250	900	1,450	100
% of State Total		100.0	50.0	4.6	16.7	26.8	1.9

**DRAFT HORSES BY BREED**



## MULES AND DONKEYS

The mule and donkey population of the State totaled 2,200 animals (1.2 percent of the total equine population).

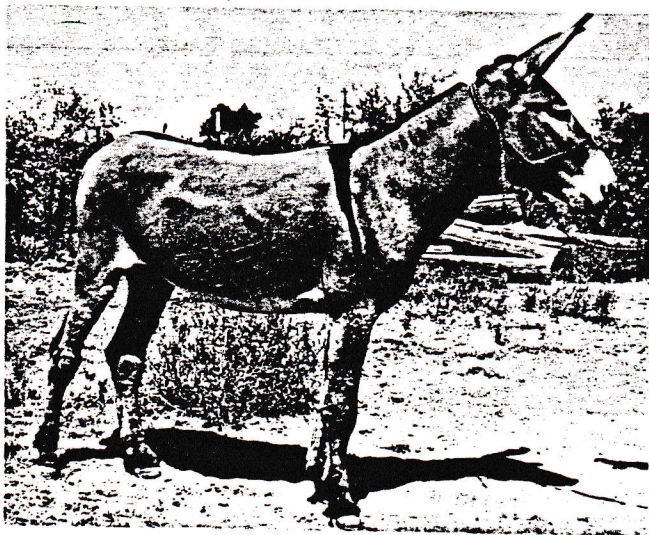


Photo by Mr. Longears and Friends Magazine

A close relative of the horse is the ass. Just as horses come in all sizes and colors, so do asses. The male ass is known as a jack and the female is known as a jennet. The most noticeable differences between an ass and a horse are that an ass has longer and larger ears, a sparser mane and tail, a more brushlike tail, and smaller hooves. The muzzle and underbelly area are light in color, and there are no chestnuts on the inner sides of the legs. The characteristic bray contrasts with the whinny of the horse.

During the early history of the United States, jacks were bred to horse mares to produce mules which are sterile in both sexes. Mules were very popular as work animals.

Donkeys are small asses. The name derives from a diminutive of the English word "dun," which describes the usual color. The Spanish translation of "donkey" is "burro," so donkey and burro are synonymous.

The popularity of asses declined in the United States as the demand for draft animals declined, until the 1960's when they became more popular as pets and curiosities. There are now several registries for different types of mules and donkeys.

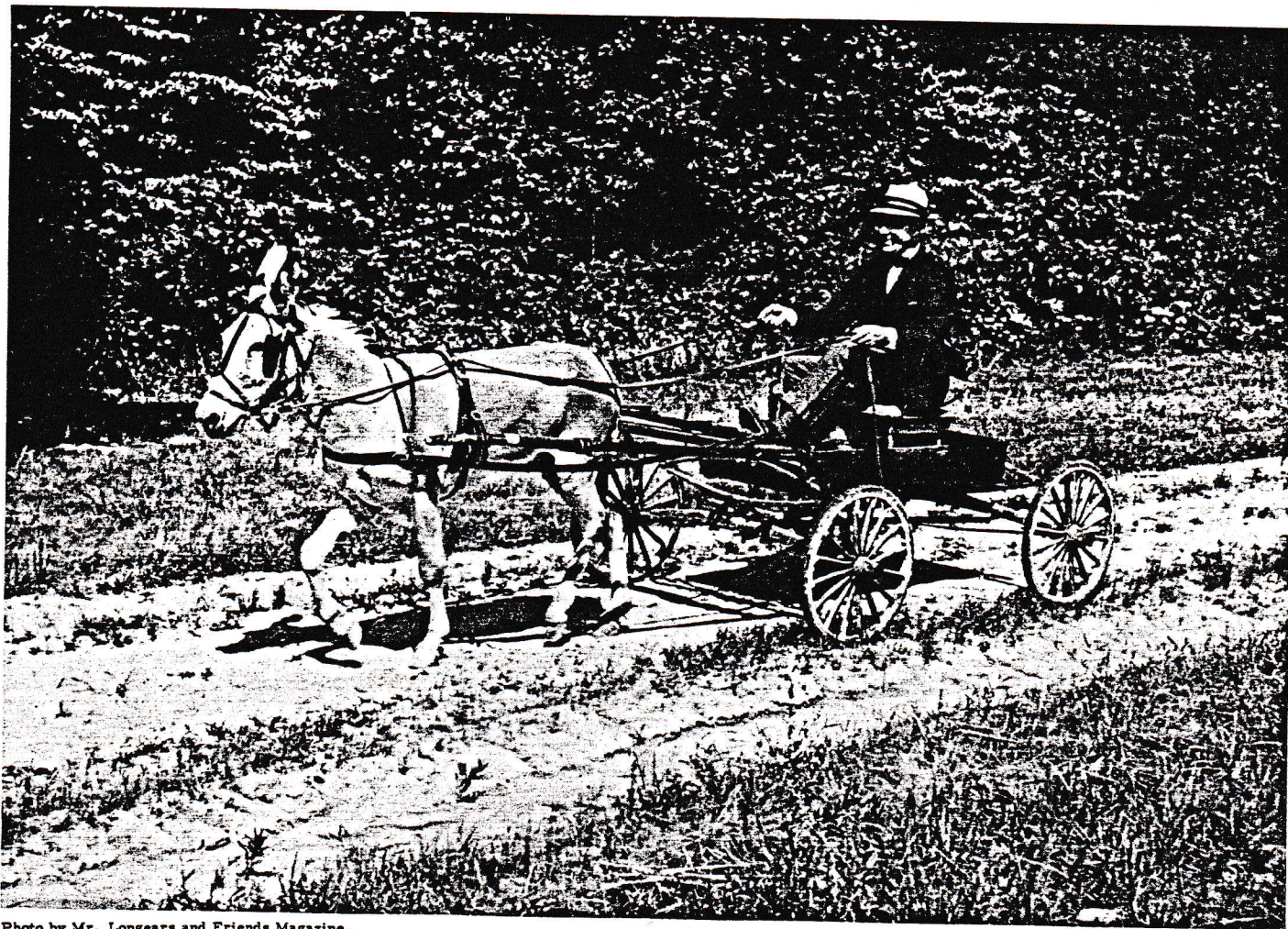


Photo by Mr. Longears and Friends Magazine

# PRIMARY USES OF EQUINES IN NEW YORK



Photo by New York State Thoroughbred Breeding and Development Fund

The 1978 Equine Survey questionnaire listed eight primary use categories: Breeding; Show; Flat Racing; Harness Racing; Pleasure (riding); Youth Projects; Work; and "Other" category with the request that the owner or operator specify the use.

A number of reports indicated a combination of uses such as "Breeding/Racing," "Breeding/Show/Pleasure," "Show/Pleasure/Youth Projects," etc. To produce accurate data that add to State totals it was necessary to edit these multiple use animals to a single primary use.

## PLEASURE USE

Nearly 60 percent (106,500 head) of the equines in New York were kept primarily for pleasure use and over one fourth (28,400 head) of them were found in the Southeast reporting district. This area contains over 11 percent of the State's people (July 1, 1977 estimate, Bureau of the Census, U. S. Department of Commerce), however, this district also borders the Long Island district which included New York City and contains well over 55 percent of the State's population. Many New York City dwellers have horses in this area

at boarding or recreational properties. The Central area had 20,600 head or nearly 20 percent of the pleasure horses followed by the Western area with 16,750 head or nearly 16 percent of the total. Again the concentration of people in these two areas is high relative to the remaining areas of the State. The Western area is second with 2.4 million people or nearly 14 percent of the State's population. The Central area has 1,206,200 people or about 7 percent of the population. The Southern and Southwest areas reported 9,250 head and 9,100 head of pleasure horses respectively.

Pleasure riding can have many forms from the simplicity of a child riding a pony around the homestead to as elaborate as loading horses in trailers and setting off to compete in trail and endurance rides or to explore new territories from horse back with fellow riders in the wilderness regions of the State. In any case the joy of riding requires open space such as pastures and trails to truly enjoy the sport. Both young people and adults who live in our urban areas of the State where there is not sufficient land to maintain a horse or pony have rented pasture or stall space on nearby farms to pursue their riding pleasures. Many animals are kept at boarding stables where more facilities are provided such as riding rings, indoor arenas, and jump courses.

Fox hunting was classified as pleasure riding. Certainly the exhilarating gallop following a good pack of hounds in search of a fox is a pleasurable sporting experience. Fox hunting has gained in popularity with several newly established clubs in the State.

### SHOW USE

Equines kept for show totaled 24,250 head, over 13 percent of the State's total. Over 50 percent (12,350) of the show animals are in the Southeast reporting area. The Western area reported 2,900 head while the Long Island area reported 2,500 head and the Central area reported 2,350 head.

Show and competitive uses other than racing are quite varied. The number and type of horse shows and exhibitions are many. Breed shows exhibit an individual breed of horse exclusively and within each show there are many different classes, such as equestrian, in which only the rider is judged; or performance classes where the animal exhibits the skills for which that breed is capable. Open shows may offer certain types of classes but horses of any breed may enter. Many of these shows are Western oriented and include cutting, reining, barrel racing, trail classes, etc. Other shows are English oriented and organized around a specific use, such as hunter and jumper shows; driving and dressage competitions, and combined training events, or horse trails. Pulling contests are another type of show for draft horses and mules. The object of these contests is to match the strength of one team of animals against another team. Still another type of show that is an outgrowth of pleasure riding is distance riding which is broken into endurance and competitive trail riding.

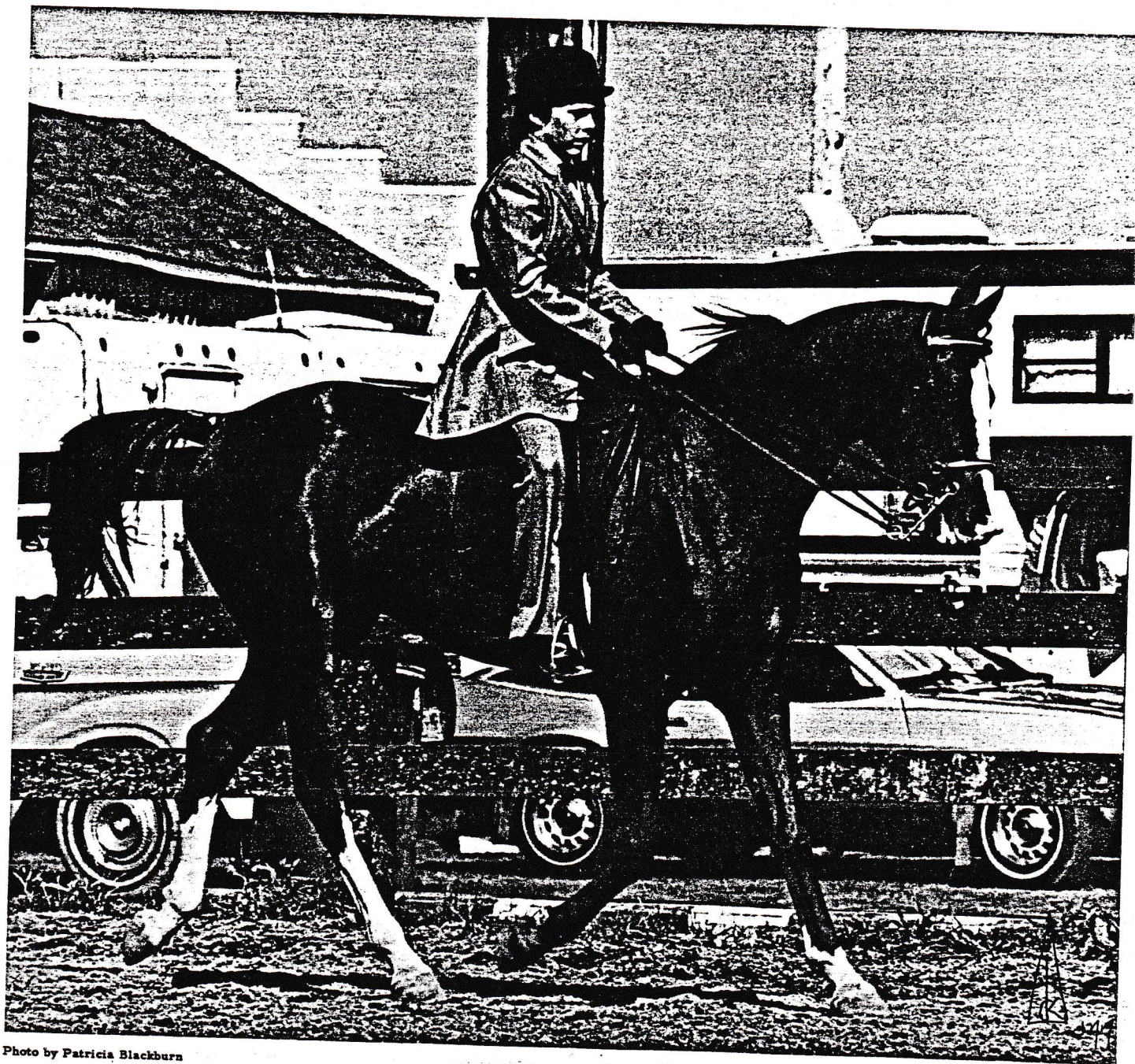


Photo by Patricia Blackburn

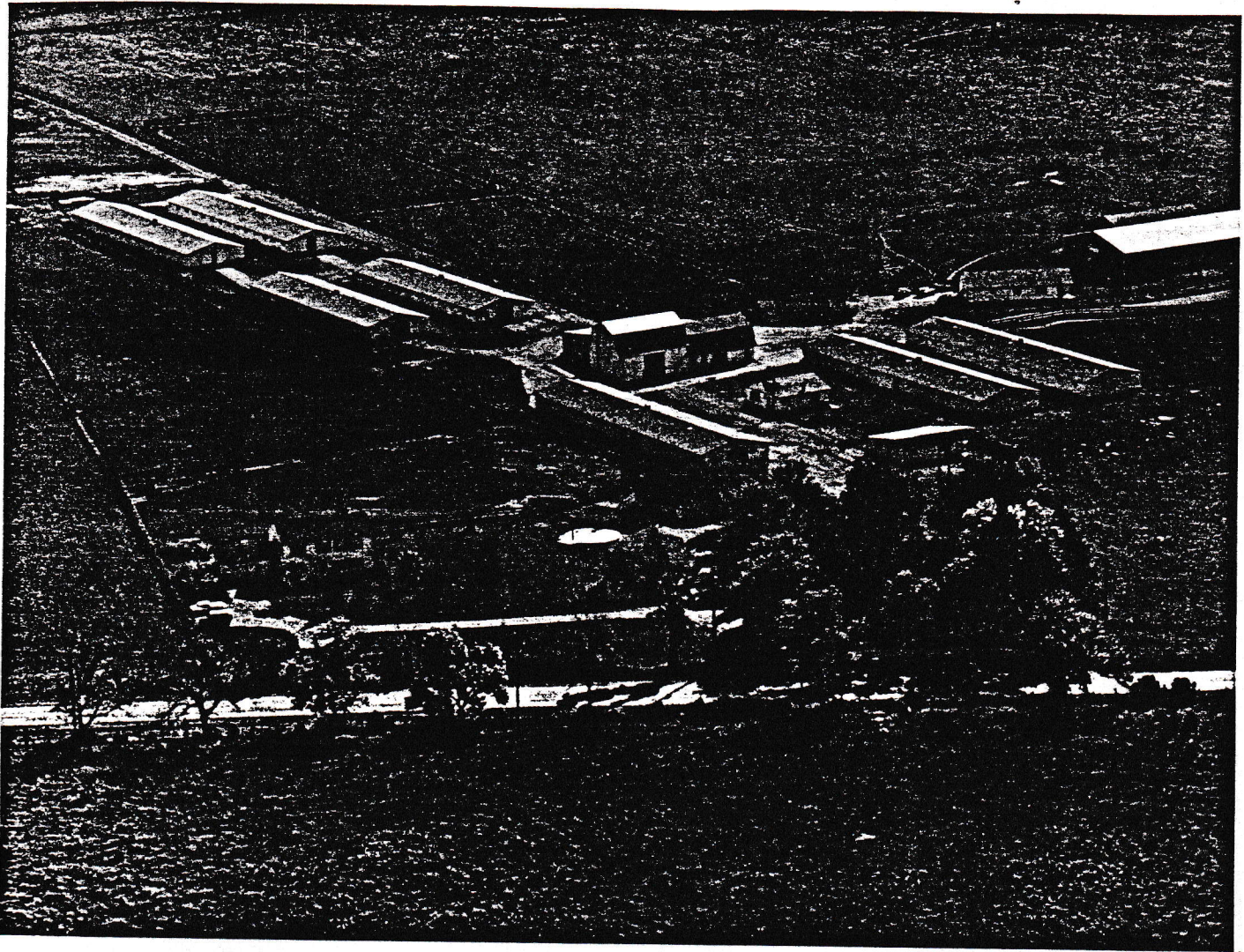


Photo by New York State Thoroughbred Breeding and Development Fund

## BREEDING USE

Breeding animals totaled 16,300 or 9 percent of the State's total equine. The Southeast area reported 4,700 head or nearly 30 percent of the breeding animals. Over 17 percent or 2,850 head were reported in the Western district. The Central area had 2,300 while the Eastern district had 2,150 head. These four primary breeding areas all have good agricultural land with excellent growing conditions for grass, hay and grain. They are also within a reasonable distance of the major race tracks in the State.

Breeding farms for all the major breeds of horses in New York have existed throughout the history of the State. As the number of breeds increases, so do additional breeding farms develop to provide quality animals in greater numbers. Many horse owners may breed their favorite pleasure or show mare with the hope of producing an equally enjoyable offspring, however the major source of equines still remains the breeding farm. Race and show horses are produced at such operations, but so are the larger number of pleasure mounts and beloved champions of children and adults alike.

Horse farms range from several acres and a couple of broodmares to several thousand acres with numerous broodmares and stallions standing at stud. Many of the larger operations offer boarding; breaking and training facilities; and veterinarian service at foaling.

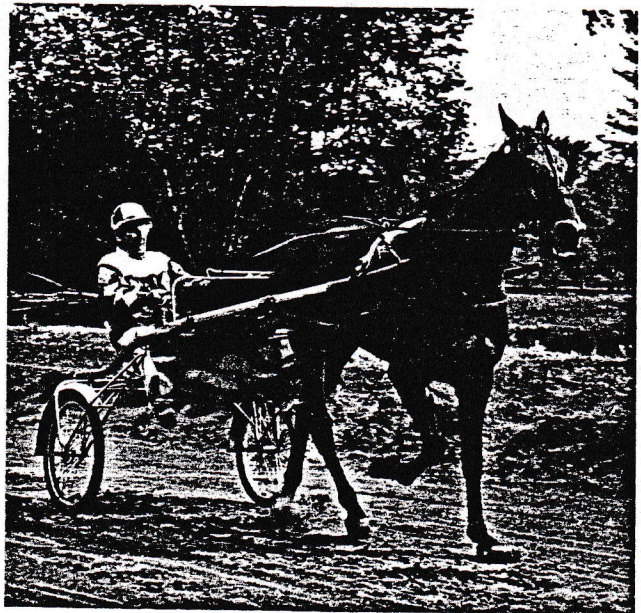


Photo by New York State Department of Commerce

## HARNESS RACING USE

Harness racing horses in New York totaled 16,150 which is 9 percent of the total equine. The Southeast district has 4,050 or over 25 percent of the total harness racing horses. Slightly over 24 percent (3,900 head) are located in the Western reporting area while 2,550 (over 15 percent) were reported in the Central district. Long Island district has over 10 percent or 1,750 head of the harness racing horses.

This kind of racing started as a sport of the crude highways and country lanes in the post Revolutionary War days -- were pure tests of speed between road horses -- and became the hobby of gentlemen who enjoyed fast pleasure driving on big city speedways and at exclusive "driving clubs" a hundred years ago. The fast harness horse, then like now, combined speed, grace and beauty into an American tradition, and a great American sport.

All harness racing today belongs to one family -- the Standardbred -- and all can be traced in pedigree to one stallion, Hambletonian owned by William Rysdyk of Chester, New York.

Today, with more than 470 racing meetings offered annually in the United States - from the smallest county fair to the giant tracks of New York State - pacers far outnumber trotters, with purists in the sport concerned about the preservation of the trotting gait.



Photo by United States Trotting Association

While the sport of Standardbred racing has been threatened in recent years by many factors, it has thus far remained a vibrant, colorful, exciting part of American life.



Photo by United States Trotting Association

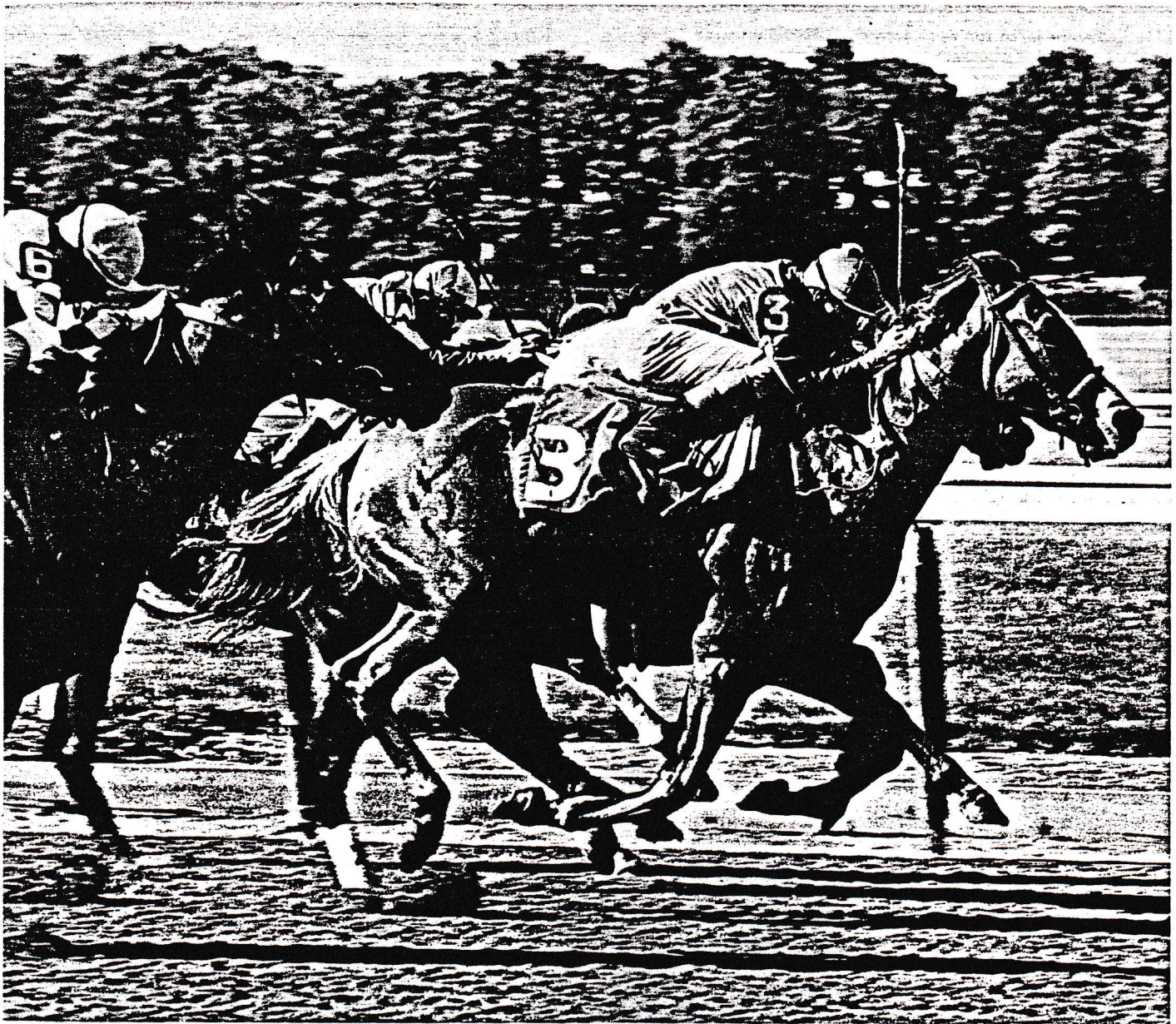


Photo by New York State Thoroughbred Breeding and Development Fund

## FLAT RACING USE

There were 7,400 flat racing horses in the State which is just over 4 percent of the total equine population. Nearly 50 percent of these animals (3,550 head) are located in the Long Island reporting district. Seventeen hundred or nearly 25 percent are located in the Western area. The timing of the survey was such that the number counted in the Eastern area at the Saratoga Track was relatively small.

Sir Richard Nicholls who became the first governor of New York (1664-1668) after receiving the surrender of New Amsterdam was to become known as the father of racing in America. In 1665 he laid out America's first full-sized racecourse on Long Island, near modern Jamaica in Nassau County. He chose a wide open plain of good grass on which long races were possible similar to those in England. The racing was, the Governor announced, "not so much for

the divertissement (amusement) of youth as for encouraging the bettering of the breed of horses" which, prior to the reign of Charles II of England, had badly deteriorated during the Puritan regime. Nicholls himself offered a silver cup to encourage both breeders and importers to participate. Now, over 300 years later, the New York State Thoroughbred Breeding and Development Fund Corporation continues to carry out this function. Today, before a breeder or an owner is eligible for breeder awards, or can enter a horse in races limited to those bred in New York State, the Thoroughbred must first be registered as "New York State Bred." The animal must be foaled in the State by a mare owned by one who maintains the breeding stock in New York, foaled in the State by a mare covered in New York the previous season, or foaled by a mare sent into the State to foal and covered by a New York State stallion the season of the birth of the foal.



## WORK USE

Equine used for work totaled 5,700, just over 3 percent of the total population. Generally the draft horses, mules and donkeys are reported in this type of use however, some of these animals are also reported as show animals. Some light horses used as mounts for out riders; prompters at racetracks; and mounts for visitors at recreational areas are reported in this use category. The Southwest area has 1,550 head which represents over 26 percent of the State's total. Both the Northern and Southeast areas report 900 head (16 percent of the total). The Southern area is fourth with 750 head. Work or draft animals appear to have been increasing in popularity over the past several years.

## YOUTH PROJECT USE

Nearly 2 percent (3,450 head) of the State's equine were used for youth projects. Many more animals than this are thought to be associated with youth projects but the primary use was reported to be for show or pleasure use. Eight hundred were reported in the Eastern district; 700 in the Southern; 550 in the Western; 500 in the Southeast; and 450 in the Central district.

Many young people who acquire horses or ponies learn horse care and management through books and magazines, from communication with experienced horsemen, and through trial and error. The horsemanship programs of 4-H, Future Farmers of America, the U.S. Pony Clubs, and other youth-oriented groups provide both organized instruction in all aspects of horsemanship and basic riding instruction. While competition in horse shows is a part of the overall program and the pleasure aspects of riding are encouraged, the horse projects have as their goal, the development of competent all around horse persons. In addition, it has been found through the years that an extra benefit of youth projects, which build upon the natural affinity of

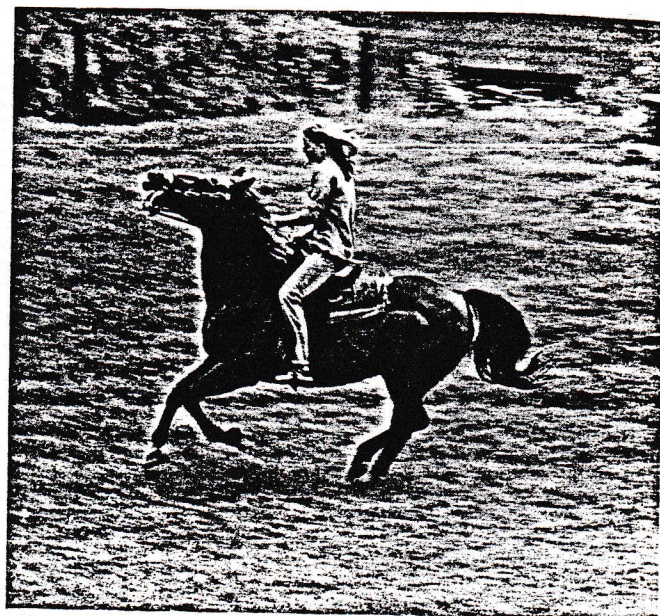


Photo by United States Department of Agriculture

young people for this animal, is the development of a conscientious and mature individual better able to meet the challenge of adulthood because of successfully meeting the challenges which responsible horse ownership and proper horse management have presented.

## OTHER USES

Two hundred fifty (250) head were reported as Other uses. This use primarily included retired animals from categories such as breeding, racing etc. and laboratory animals.

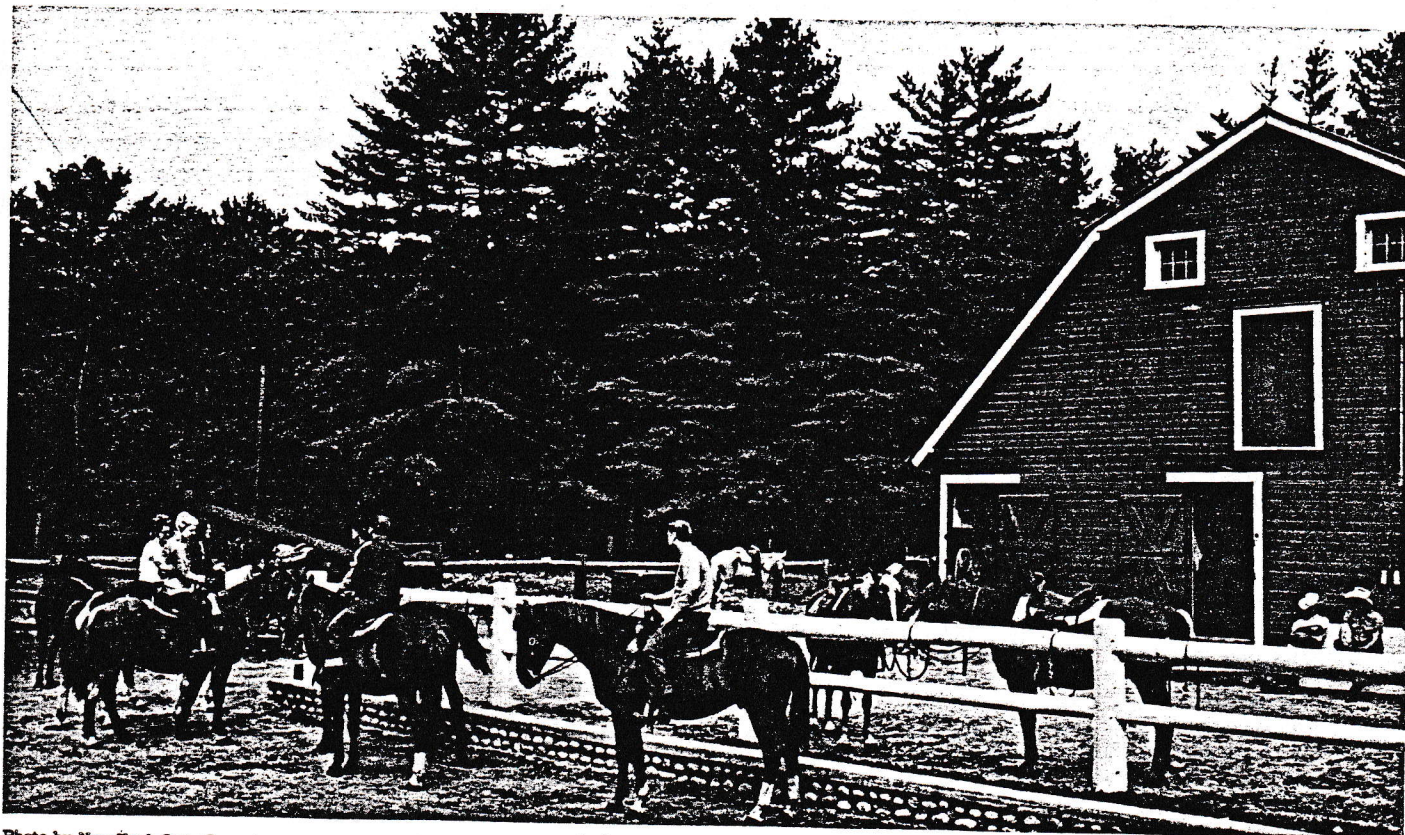


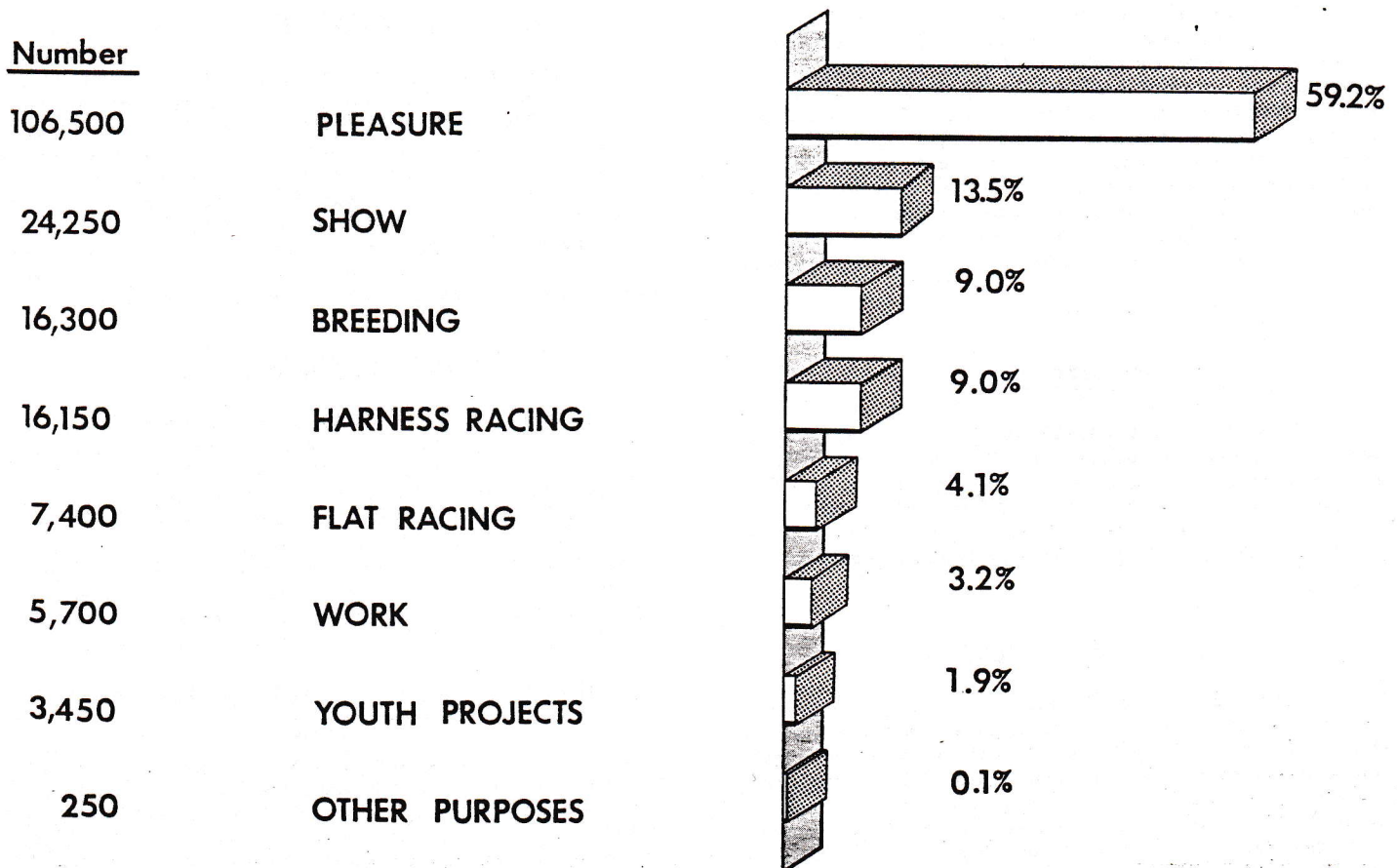
Photo by New York State Department of Commerce

**Table 5. EQUINES BY PRIMARY USE IN NEW YORK, 1978**

District	Primary Purpose Kept								
	Total Equine	Breeding	Show	Flat Racing	Harness Racing	Pleasure	Youth Projects	Work	Other Purposes
Northern	10,100	400	950	*	1,300	6,400	150	900	-
Northeast	5,500	250	200	50	200	4,500	150	150	-
Western	29,150	2,850	2,900	1,700	3,900	16,750	550	500	-
Central	28,800	2,300	2,350	150	2,550	20,600	450	400	*
Eastern	13,000	2,150	1,300	50	1,550	7,000	800	150	*
Southwest	13,950	1,450	1,000	100	700	9,100	100	1,550	-
Southern	13,250	750	700	800	150	9,250	700	750	150
Southeast	52,000	4,700	12,350	1,000	4,050	28,400	500	900	100
Long Island	14,250	1,450	2,500	3,550	1,750	4,500	50	450	-
STATE	180,000	16,300	24,250	7,400	16,150	106,500	3,450	5,700	250
% of State Total	100.0	9.0	13.5	4.1	9.0	59.2	1.9	3.2	0.1

- No reports.  
\* Less than 50 head.

**EQUINE BY PRIMARY USE**



# NUMBER AND TYPE OF EQUINE OPERATIONS

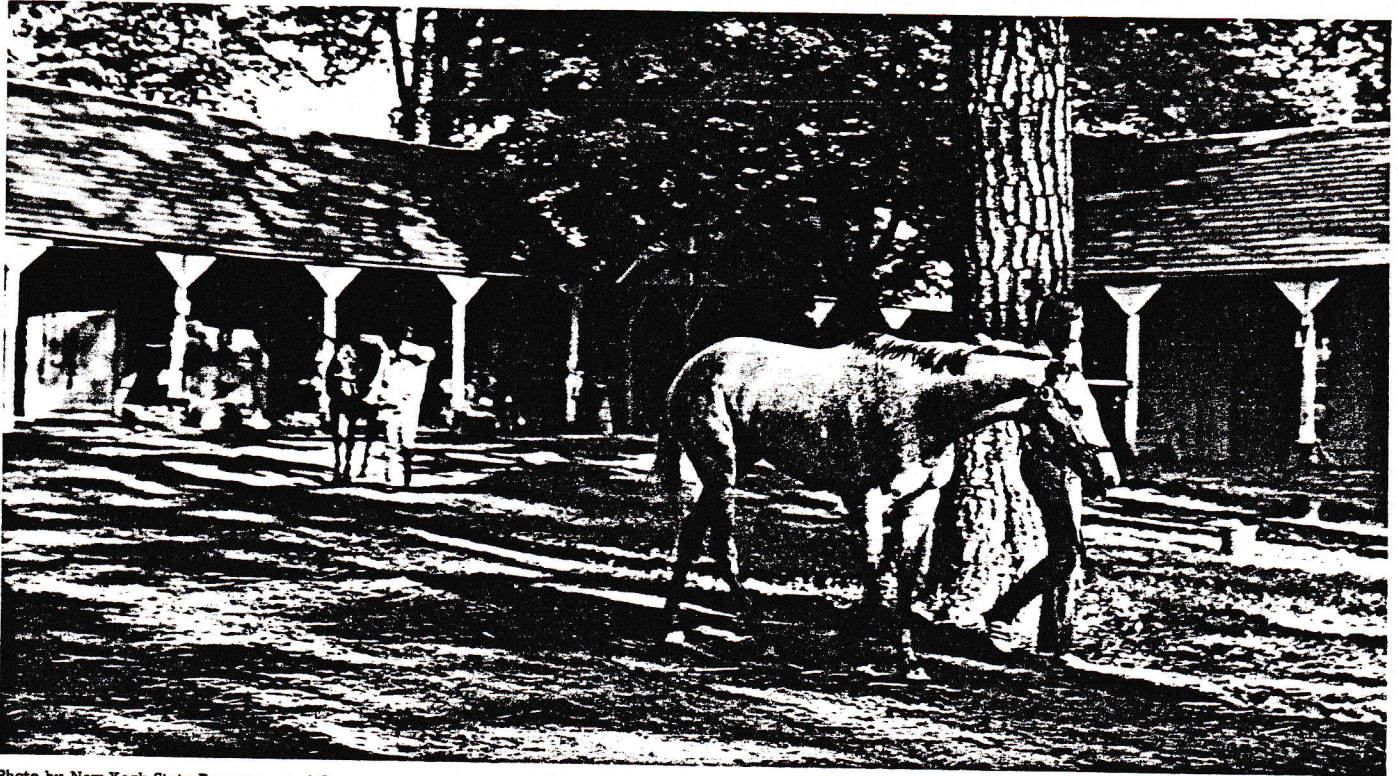


Photo by New York State Department of Commerce

New York had 48,600 equine operations in 1978. These equine operations were classified as commercial horse farms, crop and livestock farms, non-farm residences, public boarding and training operations, and riding stables and other recreational operations. The Central and Southeast reporting areas each had nearly 20 percent of the State's equine operations with 9,600 and 9,300 operations respectively. The Western area was third with just over 18 percent (8,800) operations. Just over 10 percent or 4,900 operations were located in the Southern district and less than 10 percent or 4,800 operations were in the Southwest area.

## CROP AND LIVESTOCK FARMS

Over 50 percent (24,450) of the equine operations were on crop and livestock farms. Over one-fourth (6,450) of these operations were in the Central reporting area. The Western area was second with 4,350 farms while the Southwest district had 3,150 farms. Equine on these operations can be as diverse as the farming operations themselves.

## NON-FARM RESIDENCES

Well over 40 percent (20,600) of the operations are non-farm residences. These operations are residences in the rural areas of the State adjacent to cities and small towns where people have several acres of land along with their homes to enjoy the amenities of nature and space. Most of these people realize their income from sources other than farming or horse breeding activities. Most of the animals owned by the non-farm resident are for pleasure, show, or youth project.

## PUBLIC BOARDING AND TRAINING

Public boarding and training facilities in the State totaled 1,350 or nearly 3 percent of the State's total operations. The Southeast and Long Island areas both had 250 operations or nearly 20 percent of the total. Two hundred were located in both the Northeast and Western areas. The Northern and Central areas each had 150 operations. These operations are for the horse owners who do not have adequate space or time to properly maintain their equine. The animals can be any of the several major categories of equine uses. Most are pleasure animals owned by urban dwellers.

## COMMERCIAL HORSE FARM

Almost 3 percent (1,300) of New York's equine operations are commercial horse farms. Nearly 50 percent or 600 were located in the Southeast reporting area. About 20 percent (250) were in the Western district and well over 10 percent (150) in the Central area. Commercial horse farms are the most prolific horse producing operations in the State. Most operations have numerous mares and several standing studs of a specific breed specialized by the operation. Generally these operations are located in the better farming areas for good grass and hay production.

## RIDING STABLES AND OTHER RECREATIONAL OPERATIONS

Less than 2 percent or 900 operations were classified as riding stables and other recreational operations. Four hundred of these operations were in the Southeast area and 200 in the Long Island district. These operations were primarily the dude ranches and operations that rent horses for riding by the non-experienced or novice horseman but also included the State parks, city parks, and race tracks.

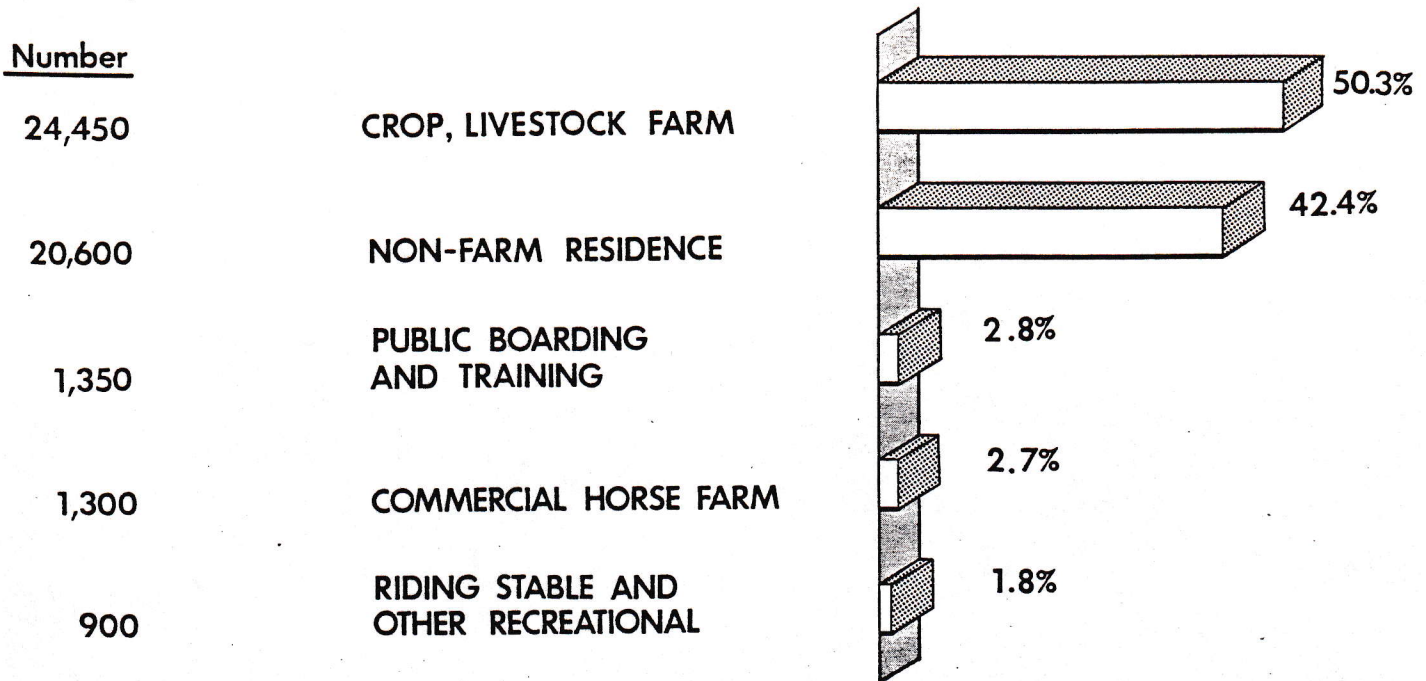


**Table 6. TYPE OF EQUINE OPERATIONS IN NEW YORK, 1978**

District	Classification of Operations					
	Total Equine Operations	Commercial Horse Farm	Crop, Livestock Farm	Non-Farm Residence	Public Boarding & Training	Riding Stable and Other Recreational
	<u>Number</u>					
Northern	3,600	*	2,550	900	150	*
Northeast	1,900	50	450	1,150	200	50
Western	8,800	250	4,350	3,900	200	100
Central	9,600	150	6,450	2,800	150	50
Eastern	3,500	100	1,850	1,400	50	100
Southwest	4,800	50	3,150	1,550	50	*
Southern	4,900	50	2,800	2,000	50	*
Southeast	9,300	600	2,450	5,600	250	400
Long Island	2,200	50	400	1,300	250	200
<b>STATE</b>	<b>48,600</b>	<b>1,300</b>	<b>24,450</b>	<b>20,600</b>	<b>1,350</b>	<b>900</b>
% of State Total	100.0	2.7	50.3	42.4	2.8	1.8

\* Less than 50.

## TYPE OF EQUINE OPERATIONS



# EQUINE BY COUNTY

The survey design and sampling procedures used for the 1978 Equine Survey were directed to the development of accurate State totals at a reasonable cost. The procedures were not designed to produce precise estimates on a county-by-county basis. The additional cost of such an

effort was unjustified and would have been prohibitive. Because of the interest in these data, however, the indicated county totals for all equine and all light horses are shown below for counties with 2,000 or more equines as reflected by the survey.

**Table 7. NUMBER OF EQUINE AND LIGHT HORSES IN MAJOR COUNTIES**

County	Total Equine	Light Horses	County	Total Equine	Light Horses
Number			Number		
Westchester	13,200	12,100	Steuben	3,200	1,600
Orange	8,500	7,300	Broome	3,100	1,700
Suffolk	7,300	6,800	Columbia	3,000	2,600
St. Lawrence	6,800	4,200	Saratoga	3,000	2,600
Dutchess	6,000	5,700	Tioga	3,000	2,600
Greene	5,600	4,500	Jefferson	2,800	1,200
Chenango	5,400	3,600	Livingston	2,700	2,200
Erie	5,400	4,800	Onondaga	2,700	2,300
Oneida	5,100	4,200	Ulster	2,700	2,100
Cortland	5,000	3,000	Allegany	2,600	1,400
Nassau	5,000	4,900	Rensselaer	2,600	2,100
Chautauqua	4,700	2,300	Madison	2,500	2,000
Monroe	4,600	3,600	Schuyler	2,400	1,400
Rockland	4,600	4,100	Wayne	2,400	1,800
Sullivan	4,300	4,000	Orleans	2,300	1,900
Ontario	4,100	3,300	Albany	2,200	1,800
Tompkins	3,500	2,100	Essex	2,100	1,100
Cattaraugus	3,500	2,600	Cayuga	2,000	1,100
Otsego	3,400	2,300	Schoharie	2,000	1,900
Delaware	3,300	2,200			



Photo by New York State Thoroughbred Breeding and Development Fund

## SAMPLE DESIGN AND SURVEY PROCEDURES

Since a complete list of horse owners in New York was not available to permit an actual census of all operations, known sources were asked for names to build as complete a list as possible. A survey of this list was combined with a sample of 440 small units of the State's land area. This procedure of using both a "list frame" and an "area frame" permitted coverage of all equine without significant omissions or duplications in the indicated State totals.

The New York Cooperative Extension Service; New York Horse Council; various horse breeder groups; veterinarians from throughout the State and other groups involved with equine provided names of owners and commercial horse operations. These organizations gave us nearly 31,000 names which yielded a list of 24,841 owners and operators (sampling units) after duplication removal. This universe was classified into six size groups: 0 or unknown equine, 1-4, 5-9, 10-19, 20-49 and 50 or more equine or commercial horse operations.

Every name on the list was mailed a questionnaire August 1. The owners were asked to report on the equine they owned and the commercial operations were asked to report the animals on their operation. During data edit procedures all animals reported by owners on commercial operations were removed from the reported total to avoid duplication in the count. A total of 7,074 questionnaires were returned from this first mailing. A second mailing produced 4,512 additional responses.

From the list of owners and operations that did not respond to the two mail requests, a non-response sample of 1,771 units were selected by size group. Sampling rates varied from five percent for the 1-4 equine size group to 100 percent of the commercial horse operations. Each operation was surveyed by telephone or personal interview. This information was expanded to account for non-respondents to the mail portion of the survey.

The second sampling procedures used was a "land area sample" or "area frame." Four hundred forty sample areas of land (about one square mile each) were surveyed for horses and owners. This was used to measure the completeness of the list coverage and to estimate the number of animals not included in the list of names and addresses. The New York Crop Reporting Service maintains this area frame of the State's total land area for periodic use in regu-

lar estimating programs. The land area in each of the sample units is known along with its expansion factor to represent the like area units not surveyed.

Field personnel visited each sample area. Using aerial photography to identify the area being surveyed, the enumerators completed a questionnaire for the operator of each land area with equine regardless of the animals ownership. Further questions concerning the ownership of the equine were asked to avoid the counting of the animals more than once. After data collection from the land area units, the names of the persons or operations who had equine were checked against the list of 24,841 names. Data for names in both places were removed from the land area sample. Thus, the remaining survey information represented only those individuals or operations not on the list.

Expansions from the land area survey, minus those duplicated with the list, were made by multiplying the sum of the data in each area unit by its expansion factor. These expansions in turn were added to those from the list to provide estimates of State and area totals.

The estimate from a sample survey will vary depending upon the units selected in the sample. The variation in the expansions are measured by the relative error of the estimate which is the estimate divided by the statistical sampling error. When the sampling units are about the same size and a high number of units have the item of interest, the relative error will be small. The relative error gives an indication of the confidence that can be assigned to the survey expansion. The average of all possible samples will fall in the range of one relative error on either side of the published estimate two times out of three. In 19 out of 20 samples the true estimate is contained within the range of two relative errors on either side of the published estimate.

Statistically, the survey was designed to estimate the horse population at the State level and the results at this level were gratifying. The relative error for the total number of equine was 6.9 percent. The relative error for light horses was 7.8 percent and the ponies relative error was 8.5 percent. The low number of sampling units with draft horses, mules and donkeys produced a substantially higher relative error at the State level. District estimates will have larger relative errors than the State reliability given above.

# QUESTIONNAIRES

The 1978 Equine Survey used four questionnaires, 1. Mail, 2. Telephone Follow-Up, 3. Commercial and 4. Area Sample questionnaires. All four questionnaires asked basically the same questions with minor variations depend-

ing upon which portion of the survey was being collected.

The following is the basic layout and questions asked:



## NEW YORK CROP REPORTING SERVICE

Bldg. 8, State Campus  
Albany, New York 12235  
Phone (518) 457-5570

### MAIL QUESTIONNAIRE

## 1978 EQUINE SURVEY

All information you provide will be kept confidential and used only in state and area totals. Your report is needed even if you have no horses. Should members of your household receive additional copies of the questionnaire, please complete only one copy and return it along with all extra copies, in one envelope provided. This will help us eliminate duplication. Thank you for your cooperation.

*Glenn W. Suter*

Glenn W. Suter  
Director of Agricultural Statistics

Please correct any errors in name or address.

1. How many Equine of all ages in New York State are owned by you or members of your household? (Include horses, ponies, donkeys or mules) ..... NUMBER  
103

2. Please classify your reported equine by breed.

a. HORSES (other than draft horses or ponies)

	Number
1. American Saddle Horse .....	201
2. American Quarter Horse .....	202
3. Appaloosa .....	203
4. Arabian .....	204
5. Morgan .....	205

	Number
6. Standardbred .....	206
7. Tennessee Walking .....	207
8. Thoroughbred .....	208
9. Crossbred or unknown .....	209
10. Other (Specify) _____	---

b. DRAFT HORSES

1. Belgian .....	301
2. Clydesdale .....	302
3. Percheron .....	303
4. Shire .....	304

5. Suffolk .....	305
6. Crossbred or unknown .....	306
7. Other (Specify) _____	---

c. PONIES

1. Hackney .....	401
2. Shetland .....	402
3. Welsh .....	403

4. Crossbred or unknown .....	404
5. Other (Specify) _____	---

d. DONKEYS AND MULES

415
-----

The sum of the entries in item 2a through 2d, should equal the number in item 1



3. What is the primary use of your reported equine?

Number		Number	
a. Breeding.....	501	e. Pleasure (riding).....	505
b. Show.....	502	f. Youth Projects.....	506
c. Flat Racing.....	503	g. Work.....	507
d. Harness Racing.....	504	h. Other (Specify).....	---

The sum of the entries in item 3a through 3h, should equal the number in item 1.

4. What type operation is your place? Check (✓) one.

OFFICE USE		OFFICE USE	
a. Commercial horse farm ( )	601	d. Public boarding and training stable ( )	604
b. Farm (crop and livestock) ( )	602	e. Riding stables and other recreational ( )	605
c. Non-farm residence ( )	603	f. Other (Specify) ( )	---

5. In what county (counties) are the (item 1) equine located?

OFFICE USE	
County name _____ No. equine _____	701
County name _____ No. equine _____	702

6. How many of your reported equine are located on land that you do not operate?

If your horses or ponies are located on other land, please list the names of the operations where they are located. (Attach additional lists if needed.)

Name	Farm or Stable Name (if any)	
Address (Rt., Box, St.)	Post Office	Zip Code
Telephone (Area Code) ( )	Number of Equine	

7. What persons other than the name on the address label may also be listed as owning or associated with your equine? This would include youth in 4-H horse clubs, members of riding groups, show teams, etc. This will prevent us from accounting for the same animals more than once.

Name	Farm or Stable Name (if any)	
Address (Rt., Box, St.)	Post Office	Zip Code
Telephone (Area Code) ( )	Number of Equine	

8. Thank you for your cooperation. When results of this survey are available would you like to receive a copy? Check ( ) one.

Yes ( ) - 1  
No ( ) - 0

Question 1 - The total number of equine owned.  
Question 2 - The total equine broken-down into light horses, draft horses, ponies, donkeys and mules. The horses, draft horses, and ponies were further broken-down by breed.

Question 3 - Establish the primary use of the reported equines.

Question 4 - The type of operation reporting equine.

Question 5 - County location of reported equine.

Question 6 - Number of equine on other operations not operated by respondent. This question was asked to avoid accounting for animals more than once. Many of the reported animals were located on commercial operations that had already accounted for the reported animals.

Question 7 - Other individuals associated with the reported equine. We found that several people may own a single animal or group of animals. This question avoided counting the animal more than once.

The Mail and Telephone Follow-Up questionnaires were identical to the presented questions. The Commercial questionnaire was worded to obtain the information about the equine on the operation in Questions 1 thru 3 as opposed to ownership of the animals in the Mail and Follow-Up questionnaires. Questions 6 and 7 were not on the commercial questionnaire.

The Area Sample questionnaire had two additional questions. The first asking the "Total number of equine on the land sampled" and the second asked about individuals other than household members who were associated with the reported animals in the sample area. The total equine on the sampled land area was expanded by the sampling interval of the land areas for a statistically sound estimated total while the "other individuals" question helped to determine the overlap of the area sample survey with the list survey. Questions 2 and 3 were asked about the equine in the sampled land area. Question 5 (the county data) was not asked.

## ACKNOWLEDGEMENTS

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### REFERENCE MATERIAL

Bibliograph text titled "The Horse" by J. Warren Evans, Anthony Barton, Harold F. Hurtz, and L. Dale Van Vleck, authors

National Museum of Racing Inc.

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### ASSISTANCE AND SUPPORT

American Albino Horse Association, Inc.

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Cazenovia Pony Club

Pony of the Americas, Inc.

Cobleskill Agricultural Society

Rojan Farms

Elmira Horse Show

Shetland Pony Identification Bureau, Inc.

Empire State Arabian Horse Association

Standard Jack & Jennet Registry of America

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Warren County Horsemens' Association

Harness Horse Association of Central New York

Western New York State Dressage Association

International Arabian Horse Association, Half-Arabian Registry

Woodlands Trails Riding Association

Jockey Club

Woodstock Riding Club, Inc.

Kentucky Riding Stables, Inc.

Wyoming County Sheriff's Posse

Long Island Appaloosa Club