# Introduction and "Horses in the Wild"

#### **Teaching notes for Powerpoint slides**

## SLIDE #2

In order to work in harmony with horses we need to be clear in our minds about three main areas.

FIRST we need to know about the nature of horses. Horses are not four-legged humans or overgrown puppy dogs and we need to respect their "horseness".

SECOND we need to establish a common language with each horse we work with. Although a well-trained horse may know the language you learned from reading training books or from another horse person, each horse and rider speaks a dialect of that language and it's up to you to discover your horse's and teach him yours. It is comparable to learning 19th century Parisian French in high school and using it to communicate with 20th century French Canadians or Cajuns. Most horses are willing to learn our language; we just need to set the ground rules.

THIRD, we need to be very clear in our minds exactly what we are working toward. If we diligently train our horses in jumping and dressage when what we really want, deep down, is to have a safe and well-mannered trail horse or to pen cattle, we are going to confuse our horses and ourselves.

#### SLIDE #4 WHAT THIS CLASS IS ABOUT

List of points to be covered in the class

#### SLIDE #5 WHY IS THIS CLASS IMPORTANT?

Having some knowledge can give you added confidence when working around large animals, especially horses.

#### SLIDE #6 KNOWLEDGE KEEPS YOU SAFE

Knowledge gives you confidence

Knowledge keeps you safe

In an emergency situation you may be the only person who has knowledge of how to work safely around horses

#### SLIDE #7 YOUR SAFETY IS NUMBER ONE!

You should always consider your own safety first. Work fast but move slow. In order to be safe around a horse, you need to understand his nature and his limitations.

Because a horse's first instinct is flight, it's important to move slowly around him. Let him know where you are at all times. If a horse is dozing and doesn't hear you approach, he'll wake up to a strange being in his safety space and could panic. Any aggressive movement on your part could send him flying as well.

Let's look at where horses come from.

### SLIDE #8 EVOLUTION OF THE HORSE. WHERE DID HE COME FROM?

The origin of equines can be traced to the EOCINE period, between 60 and 50 million years ago. Eohippus, or Dawn Horse, was about the size of a Cocker Spaniel - 14 inches (35.6 cm) at the shoulder - and is thought to have weighed about twelve pounds (5.4 kg). He had four toes on the front legs and three on the back, which were padded like those of a dog and allowed easy movement over wet ground. These toes and pads are now the ergots and splint bones found on the legs of the modern horse. Eohippus was a browsing animal that lived on soft leaves growing on low shrubs. He was well equipped to survive in the semi-tropical forests of our Midwest.

By the OLIGOCENE period, about 38 million years ago, Eohippus had evolved into Mesohippus and Miohippus and had achieved the size of a German Shepherd. Both these evolutions were taller and heavier, with teeth that allowed them to eat a wider variety of plants. They were still browsers living in forests and swamps. Their front feet were reduced to three toes, still padded, but the middle toe carried most of the weight.

The watershed in the development of the horse occurred in the MIOCENE period, about 26 million years ago, when he moved out of the forests and swamps and onto the plains. As he adapted to changing conditions, his neck and head became longer, the incisors moved forward in the skull and the form and position of the eyes altered to allow the horse to view the horizon while grazing. His legs became longer, giving him speed to escape from predators. These horses, Parahippus and Merychippus, stood firmly on a single toe with semi-functional side toes, and were about 10.5 hands (42 inches or 106.7cm) high.

The first truly single-hoofed horse was Pliohippus, which evolved about seven million years ago in the PLIOCENE period. The side toes became the splint bones found in modern horses. This small, lightly built horse was the prototype for the Equus caballus, the first true horse, which evolved during the PLEISTOCENE period, almost two million years ago. Equus had a rigid spine, with short, powerful and well-muscled bones in the upper limbs and long, slender unmuscled lower limbs. He was well equipped for life on the open plain and had a well developed defense system. The foot pad of earlier evolutions became the frog of modern horses.

Equus spread across the Bering Strait from America to Asia. Primitive man, starting to evolve in Asia, followed horse herds back across the Bering Strait into America, some staying to become the first Americans. When the glaciers retreated about ten thousand years ago, the land bridges between what is now Alaska and Asia disappeared.

Soon after that the horse became extinct in North America. No one knows why. They were later re-introduced to the continent by Spanish explorers.

#### SLIDE #9 DOMESTICATION

Horses were first domesticated as draft animals on the Eurasian Steppes in the Near East between 4500 and 2500 B.C. It was at this time the people of that area adopted a nomadic way of life. They had already domesticated dogs, cows, sheep, and goats, but they needed a larger animal to carry their belongings. The horse became their sole livelihood -- he provided transportation, milk, meat and skins. By 1000 B.C., domestication had spread through Europe, Asia and North Africa.

There were four primeval types of horses which were domesticated at different times and places. These are divided into size groups -- two are horse, two are pony.

PONY I Pony I developed in Northwest Europe. He was approximately 12 hands tall, had very thick skin, was brown or bay in color, and was "waterproof". His direct descendant is the Shetland Pony.

PONY II Pony II developed in North Eurasia. He was heavier in build than Pony I and was "frostproof". He was dun or cream color and had the dorsal stripe and bars on the legs associated with the "dun factor". He was the forefather of Przswalski's Horse.

HORSE III Horse III developed in central Asia and west into Europe. He had a long, narrow, Roman head, a long neck, long ears, slab sides and a sparse tail and mane. He was "drought proof". He was the forefather of the Andalusian.

HORSE IV Horse IV developed in the western area of Asia. He was about 12 hands, was "heat proof" and provided the "quality" in today's breeds - he was fine boned, had a high-set tail and abundant mane and tail. He was the forefather of the Arabian.

All breeds are crosses or descendants of these four basic groups. Ponies are crosses of Pony I and Pony II. Draft horses are Pony II and Horse III. Light horses are Horse III and Horse IV.

The physical characteristics of groups and breeds were originally determined by climate. In cold areas, horses were considered "cold blooded" -- compact and calmer, with thicker bodies, thicker skin and more hair. In hot areas, horses were "hot blooded" -- they had larger, rangier bodies, thinner skin, and were flightier.

The horse was first domesticated for milk and meat. He moved up in status to a pack animal, and was later promoted to a riding animal. It was the introduction of horse trading that brought about the development of the various horse breeds.

# SLIDE #10 BASIC HORSE GROUPS

Horses are divided into five basic groups, determined by size and weight.

Draft horses, the largest and heaviest group, stand over 14.2 hands, and weigh over 1500 lbs. These horses are often 17-20 hands, depending on the breed. They were once used as war horses and later to pull plows. They have a low center of gravity, large bones, and their body type is wide, deep, compact and strong.

Draft breeds include: Percheron, Clydesdale, Suffolk, Belgian, and Shire. There are also draft ponies such as the Haflinger, which are built like drafts but in a smaller size.

Next in size is the "heavy harness" group. These horses were primarily developed to pull coaches and are over 14.2 hands. They are part draft, part light horse. Breeds include: Hackney, Russian Orloff, and Cleveland Bay.

The "light harness and saddle horse" is the most common group. They range in size from 14.2-17 hands, and weigh between 900-1400 lbs. They are lighter in body than the above groups and are the general utility horses. They can pull carriages, herd cattle, jump fences, or run races. These are the breeds even non-horse people know: Thoroughbreds, Quarter Horses, Appaloosas, Arabians, and Standardbreds.

Other breeds include: Appaloosas, Morgans, Mustangs, Peruvian Pasos, Tennessee Walking Horses, and the color breeds -- Paints and Palominos.

Next in size and weight are the "ponies and miniatures". They are under 14.2 hands -- miniatures can be no more than 32 inches tall and have been bred as small as 15 inches (the size of their prehistoric ancestor, the Dawn Horse). Pony sizes range from the 10 hand Shetland to the 14 hand Irish Connemara, which is the largest of the pony breeds, and weigh between 350 and 900 pounds. Other pony breeds include the Welsh Mountain Pony, Hackney ponies, and Pony of the Americas, a breed developed in the 1950's.

A separate but growing group of horses is the "sport horses". These horses are similar in build to the Heavy Harness group and are often European. They are becoming more popular in this country as interest in dressage and cross-country competition grows. They are taller and heavier boned than the saddle horse breeds.

They are also called warmbloods because they combine the characteristics of both the cold-blooded draft horses and the hot blooded saddle horses. The more famous warmblood breeds are Holsteiner, Hanoverian, Trakehner, Lippizanner, and Andalusian.

#### **End of Section**