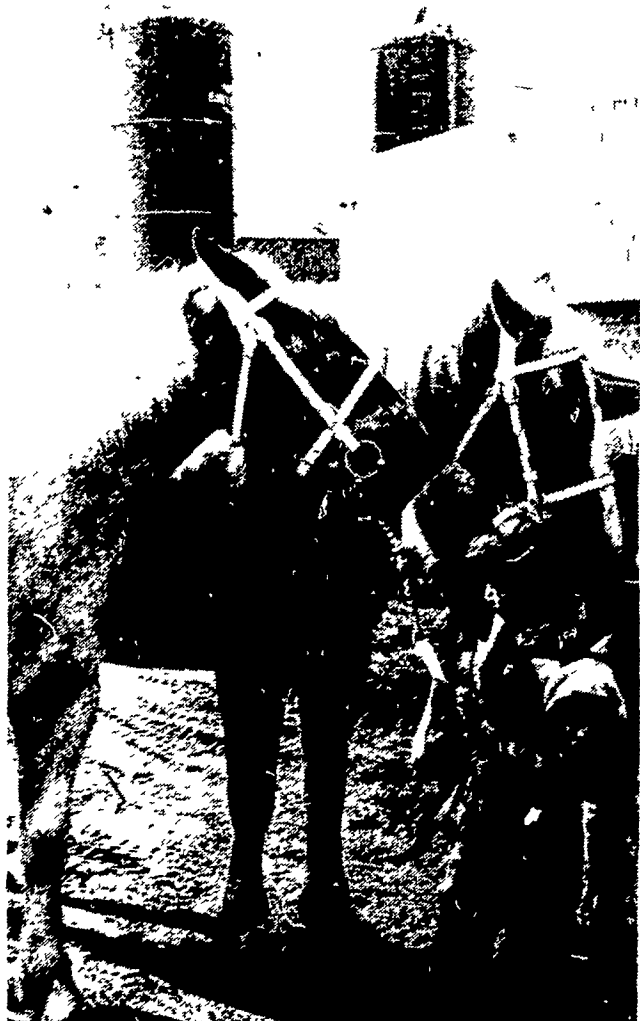


Draft horses back at Penn State, for the weekend



Ron Palmer, a draft horse farrier from St. Peters, wants to make sure this Clydesdale's shoe has the right fit.



Nine year old Todd Biddle, son of Lewis and Gail Biddle, Oak Hill, Centre Co., holds on to half-ton Janet, a Belgian yearling. He doesn't seem to mind his weight disadvantage, weighing only 60 pounds.



Nearly seventy-five draft horse enthusiasts turned out for the first conference of its kind held at Penn State.

BY SHEILA MILLER
UNIVERSITY PARK — When Penn State was a bit younger, the land grant college was the home for draft horses and mules. These animals were not there just for fun or study—they were there to work.

Last weekend, for the first time in years, the Penn State campus was once again adorned by the big drafts. They were participating in the first Draft Horse Conference sponsored by Penn State's College of Agriculture and the Pennsylvania Horse and Mule Association.

This two day event brought close to seventy-five draft horse and mule enthusiasts together for learning and sharing ideas.

Dr. Lester Griel, a Penn State veterinarian, reviewed the nutritional requirements of the draft horse, and emphasized the need to feed good quality hay and plenty of oats to get the horsepower in the field.

Dr. Frederick Fregin, a veterinarian from the University of Pennsylvania, spoke to the group on conditioning the draft horse.

He admitted there were no good scientific studies on pulling and plowing horses and their response to exercise, so he compared them to studies he had conducted on Thoroughbreds.

Fregin explained the working horse has an increased blood pressure in both its heart and lungs, and the horse uses more oxygen than when at rest.

"It is inappropriate to train the pulling horse only in doing that specific activity," Fregin stressed. "You need to build up the horse's endurance—you need to get it into condition so that the heart muscle increases in size and strength uniformly. The skeletal muscles need to grow in their ability to absorb the oxygen they need during hard work."

"If you don't develop the heart muscle uniformly, the one side of the heart, the left ventricle, will be stressed. Horses that are said to die of heart attacks actually blow out their one ventricle."

Fregin pointed out the need to acclimate the horse to hot, humid weather to insure best performance. "When the horse sweats, it loses fluids and electrolytes. This leads to fatigue."

He added that of the trace minerals, sodium, chloride, potassium, phosphorus, and

calcium, the level of potassium is extremely important in the endurance of the draft. When there is a deficiency of this mineral, the horse's muscles tie-up. He emphasized this is not the same as Monday morning sickness, caused by the horse having Sunday off from its six-day work week.

Another area of concern when conditioning the horse, Fregin said, is the body and more importantly the muscle temperature. He said the muscle temperature, when a horse is working, can be about five degrees higher than the rectal temperature.

He cautioned the group that if the rectal temperature is 107 degrees Fahrenheit, the horse is likely to die unless he is cooled down immediately. Fregin said signs of overheating are exhaustion, respiration, and the fact that sweating stops.

Fregin recalled one work horse that would lie down unless the farmer unhitched him at lunch time to rest.

For blood pressure, Fregin told the group that the best place to take a horse's pulse rate is either behind the left foreleg, behind the elbow; along the jaw; at the jugular vein in the neck; and inside the leg below the knee.

If a horse is in condition, but has sore feet, it still won't work. Ron Palmer, of St. Peters, is a farrier and horse shoer who specializes in drafts.

What's the biggest problem he runs into? "It's hard work," he said. Getting serious, Palmer said the one problem he does have with draft horse owners is that they don't pick up their horses' feet.

"Handle the horses' feet as soon as they're born," he said. "And, you need to keep after their feet—cut the milk toes on the foals so that they break over the center of their foot and grow straight."

Palmer told the draft horse men to look at their horses' feet and make sure both sides of the heels are the same length. He added the angle on the foot should be 90 degrees, with rounded toes.

"Raise a straight-legged foal—not one that can hit his chin with his knees with feet going in different directions," Palmer stressed. "If he's going to go like a winner, he'll do it without the weights and a lot of toe."

Going along with the big problem of not picking up their feet enough, Palmer said the biggest problem in drafts is thrush. He advised that, along with clean and sanitary stables, owners need to treat any animals that have thrush with Clorox, Coppertox, or any disinfectant.

In shoeing the big horses. Palmer said it is important to have at least 1/8 inch of the shoe sticking out the back of the foot to support the weight of the horse. He added the horse shoe nails should be kept forward or the heel won't be allowed to expand as the hoof grows.

Palmer also recommended the horses have flat shoes on rather than pulling shoes unless they are in contests more often than once every two months in order for the foot to have the right frog pressure and support.



Charles Lindsay, Greencastle, demonstrates the proper way to harness this Belgian draft horse.



David Keller, Hummelstown, shows how to measure a collar.

Elmer Lapp, Kinzers, talked with the other horse men on his experiences and methods in breaking the work horse, noting that in Lancaster County the breaking is done differently than in the western part of the state.

Lapp said he usually waits until the horse is three years old. He hitches it with two well-broke horses, putting the green horse on the right side. He said he uses a jockey stick, and halter on the new horse, and ties it to the middle horse. He added he takes a line around the outside the three year old.

If you don't have that many horses, Lapp said, you should start training when the horse is two years old. And, he said, never make pets out of them or they'll be stubborn.

William Howard, president of the Horse and Mule Association, discussed transporting horses safely. He stressed the horse should not be allowed to break away the first or any time they are

being loaded or they will make it a habit.

When transporting horses in winter, Howard said he puts a piece of burlap over their noses to keep the cold air out of their nostrils. He said he doesn't blanket the horses because he'd rather they traveled a little cool.

Howard said he tries to keep his heavy horses up front in the trailer or truck with the lighter horses in the back. That way if there's an accident, he said, the heavy horses won't push against the others.

He added the horses should be cross-tied if they are pickers, and should be tied in alternating directions so that if a horse steps to the side it won't hit another's foot.

Above all, he said, put yourself in the back of the truck, and drive as if you were going to be riding there—stop, start and turn easy.

The rest of the conference

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