### Western Horseman Interview

EASURE Bill Throgmorton's pulse and respiration, at rest if you choose-that is, if you can find him at rest-and you'll likely

find disqualifying rates.

But if Bill Throgmorton's pulse and respiration seem high, keep in mind it's his P&R which help keep the NATRC alive and growing. For the past twelve years, he has been among the fistful of veterinarians who are the core of this sport. He's a man in a hurry, anxious to know everything there is to know about competitive trail horses, and he's beginning to affect the whole of the horse indus-

try.

Well he should, for Bill Throgmorton has not merely influenced competitive trail riding; he, his wife, and his progeny have overwhelmed the competition. It has been an assault on all fronts. Working out of their ranch on 1995 Day Road, Gilroy, Calif., the Throgmortons (wife Joan and daughters Linda and Denise) are a beehive of trainers and trail horse campaigners. A slice of their typical day might include halterbreaking one horse, conditioning another, retiring still another, preparing one of their best for breeding, and so on till it's difficult to fathom who is arriving and who's departing.

Bill has selected his horses with great care, and his choices have more than paid off, albeit in awards, not dollars. His Morgan, Lippitts Dusty Thursday, carried Linda to the President's Cup in 1970. Two years later, with Denise aboard, another Throgmorton horse, this one a P.O.A. named Stormy, again brought home the Cup. Joan deserves recognition, too, for not only weathering Bill's energy, but for the work she has done for the NATRC independent of Bill. Bill admits, with pride, that Joan is one heck of a horsewoman and competitor with as much grit as anyone in the family.

It was during the all-Arabian trail ride championships, held last fall in Colorado, that I latched onto Bill's coattails and let loose with as many questions as I could conjure. What followed was a steady stream of wisdom, tempered by experience and a keen

ability to observe.

WH: What are the common horsemanship faults you see on competitive rides?

THROGMORTON: A rider's failure to recognize his horse's capability. Especially in competition. One of the things that beats most new riders is that they have no conception of time and distance, so pacing is the number one error.

The number two error is not getting the most out of the horse or not communicating with the horse. It's a mistake to allow the horse to do everything his own way. A horse can be taught to stand for the mount, walk through a creek, step over a log or ditch, and not charge up hills.

WH: What are the common defects in the horses you see?

THROGMORTON: I think one failure in American horse breeding programs is that they have not bothered to consider soundness. They don't worry about it. If a horse's eyes are big enough, his ears short enough, his nostrils large, he looks beautiful. But they ignore the most vital factor in horses, and that is soundness. (See WH, May '74 The Competitive Trail Horse . . . How to select a Champion by Bill Throgmorton, D.V.M.)

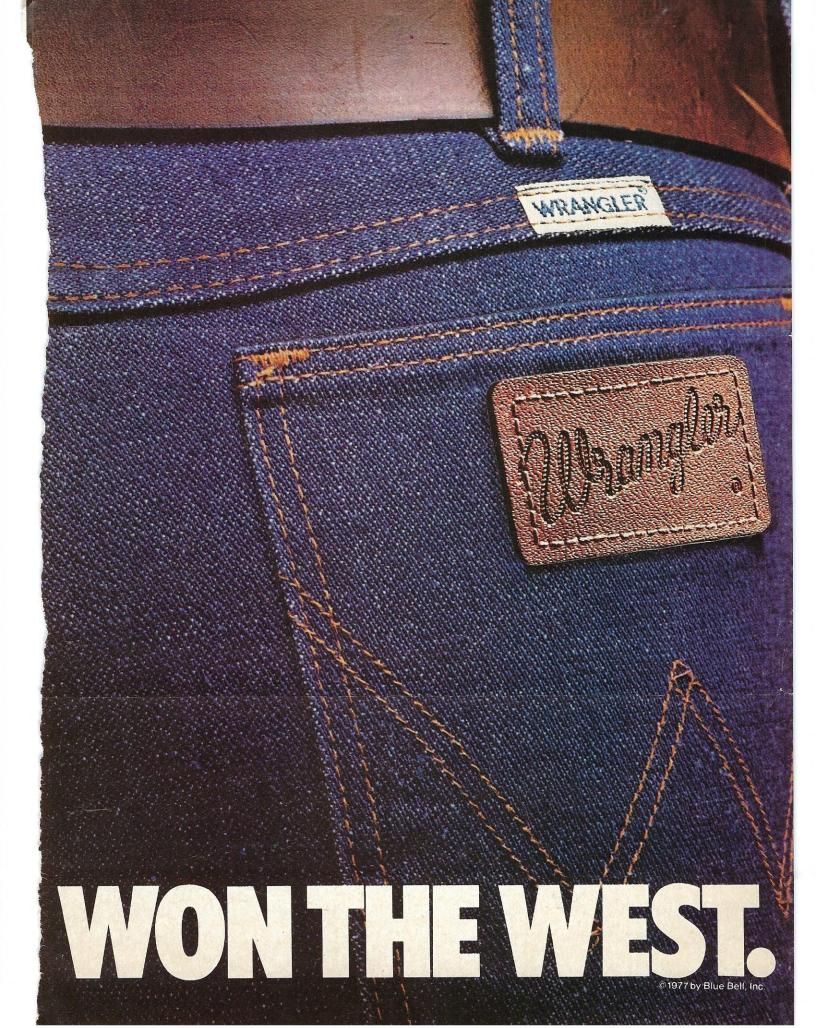
If a horse has an improperly developed foot, he has no value at all. The foot absorbs most of the concussion. The foot should have a good wall to hold nails and a thick sole to prevent bruising.

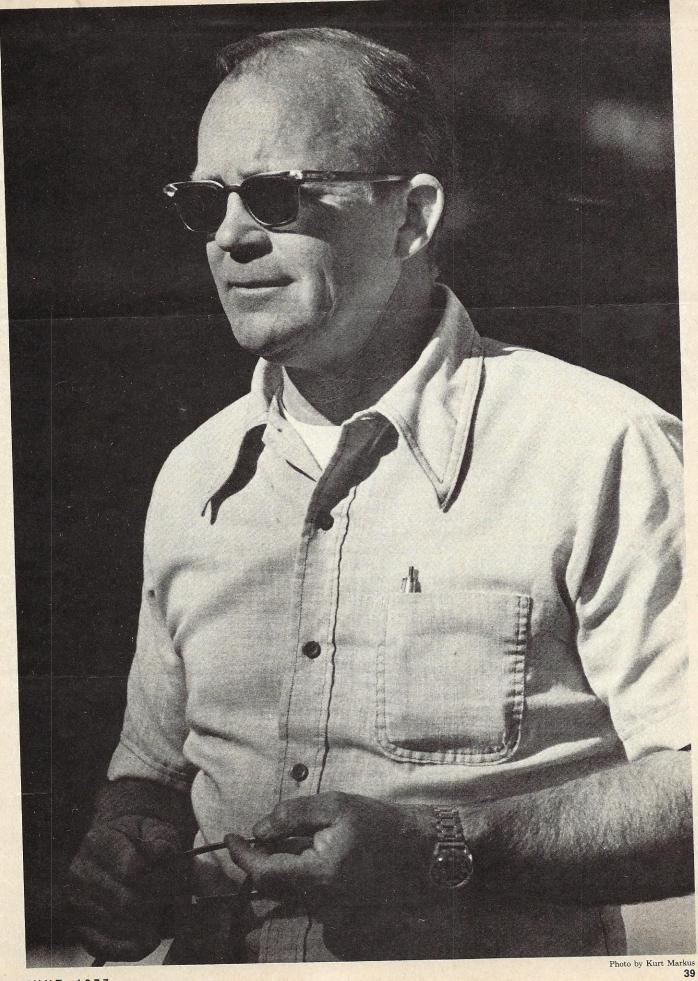
There are two breeds that are really getting into serious trouble in breeding horses with very poor backs. Saddles will not fit them. The withers are low and they're getting too much rise behind the withers up to the croup, and the croup is up to six inches higher than the withers. Some have good withers, but they fall away behind the withers and then rise to the croup (swayback) and any saddle

# THROGMORTON

In the world of distance riding, Dr. Bill Throgmorton rides point. He knows what ground has been covered, what lies ahead. And even if you're not a distance rider, what Bill Throgmorton has to say about horses will interest you. If you happen to be a competitive or endurance rider, his words are akin to gospel.

By KURT MARKUS





#### BILL THROGMORTON

that is built flat fits like a bridge. The only two pressure points are on either side of the withers and over the loin; they support no weight along the back muscles.

WH: Would you name the two preeds?

THROGMORTON: Arabian is one. Quarter Horse is another. These two are the biggest offenders. The two breeds with good backs are the Thoroughbred and the Morgan. So far, I haven't seen any gross numbers of bad backs in these breeds. They've got some mental problems, but haven't got any back problems.

I'd say the other big problems are straight shoulders, and mutton withers with hollow back couplings. Straight shoulders can cause tremendous concussion and lack of stride. Once the horse starts to lose a little weight and gets that fat off his back, there's a big hollow spot right behind the withers and on top of the shoulder blade. Any time that horse is working, the shoulder blade moves in an oval motion; thus, the shoulder blade just keeps shoving the saddle right back over the rump. This is getting to be a big problem and you see it more and more often.

WH: Would you predict that with these problems, a breed other than Arabians might dominate distance riding?

THROGMORTON: When any other breed starts breeding horses the size of Arabs, they're going to start doing better. I feel that weight carried is a very important factor, and the Arabs as a breed are built lighter. Anytime you take the average Quarter Horse and compete against the average Arabian, the Quarter Horse is going to have a 300-pound handicap. And a 300-pound handicap over a 50- or 100-mile distance is a real disadvantage. You take the Morgans, Quarter Horses, Thoroughbreds, or any other horse that is small-framed, light, and has the ability to move lightly and freely, they'll do just as well as Arabians. The Arabian is winning now because of his weight and his desire. He has a tremendous desire to compete. Arabians also have a high red cell count and their red cells are slightly smaller in diameter than some of the other breeds; this gives them better oxygen carrying capacity.

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WH: Where is this research and study concerning breeding leading us?

THROGMORTON: If a horse is sound and can be used for 20 years, you're not going to have to replace him. Raising and training a young colt gets expensive. If we start breeding more solid horses, they're going to be on the trail a lot longer, in the backyard a lot longer, and they'll be usable for a longer period of time.

WH: Do you think the show world and the trail riding world will ever find a horse that pleases them both?

THROGMORTON: There are horses that can do both, and do both well. But I can't see people that own horses for their own gratification—which is the show ring—ever becoming realistic and start to breed horses on any terms but their own: beauty and performance in the show ring. They see no long-range benefit.

Most horses can compete in a soft arena for 20 minutes. You take those same horses out of that arena and run them on the road we're on right now, and you run them for 15 or 20 minutes, I'd say those horses would be in trouble. They are unsound, no matter how beautiful they are.

We have to get away from that. We have to get a horse that is not only beautiful, but functionally and mentally sound. A trail horse has got to be mentally sound; if he's dingy or untrainable, he's not going to make a good trail horse or he's going to get himself hurt or somebody else hurt.

**WH:** Do you know of any breeders who are working for soundness?

THROGMORTON: I don't know of any breeder who is breeding specifically for soundness. There are some now that are breeding endurance horses, and I think that indirectly these people are going to be breeding for soundness.

WH: How will people go about changing their breeding program?

THROGMORTON: They've got to know where sound animals exist. They can't just compete in a

show ring and prove the soundness of their horses. They've got to take their show horses out on to the trail to find out what they will do. Vice versa, we have to take our trail horse into the show ring and see what he can do. It takes this kind of interchange for any kind of advancement. That's where the knowledge is going to come from; it's going to come from experience and testing.

WH: What sort of incentive does it take for breeders to change their programs?

THROGMORTON: It's going to take buyer demand and so far buyer demand isn't there. People I know that raise horses to sell, they sell beauty. The breeder has to have the demands put on him by the buyer; the breeder knows what sells, he knows what brings in the dollar. Why should he change? You know the old adage: As long as a horse will work and hold up, don't breed him. But if he breaks down, breed him.

What they should do is breed only stallions that have worked for five or eight years and never broke down. The buyers must demand soundness of their purchases.

WH: Earlier, you mentioned the slope of a horse's shoulder. What do you look for?

THROGMORTON: Horsemen have always measured the slope of the shoulder from the point of the shoulder to the peak of the withers. That's not the shoulder angle at all. The shoulder angle is the angle between the scapula and humerus.

Measuring the shoulder angle is simple. Just put your hand on a horse and find the spine of the scapula and draw a line on it. Usually, most horses are dirty enough so all you have to do is rough the hair up and the dirt will come up and you can draw a line in the dirt. Then step back and look at the slope. The ideal slope is about 45 degrees from the horizontal.

WH: Your breeding and conditioning program in Gilroy is attracting attention—would you describe your operation?

THROGMORTON: I've got eight head of horses—six young ones. They're all being raised specifically for trail riding. If I sell any of them, they've got to go to trail riders and they've got to be

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competed, and competed heavily otherwise I won't sell them. I've spent the last nine years trying to develop good trail horses.

All of the horses that I own are out of champions, President's Cup winners, or division winners—they're all the best I could find for trail riding. And my whole point is to prove that I can breed to get an outstanding trail horse with the proper soundness and temperament. Even now you can catch any one of them in a 20-acre pasture—and some aren't even broke.

The first horse we raised out of the bunch specifically for trail riding has been on 12 trail rides. He's won 8 firsts, 5 sweepstakes, and he's come in 2nd twice, 3rd another time, and 6th another. We bought him when he was six months old and we didn't break him until he was four. We rode him on two rides when he turned five. The first ride we entered him in, he came in second out of a class of 28 horses. The next ride he won the sweepstakes, novice division. As a six-year-old, we campaigned him with hopes of getting the high average year-end award; he did, in fact, go on to win the reserve high average award.

WH: What conditioning program do you use for your com-

petitive trail horses?

THROGMORTON: We train two or three days a week, eight to fifteen miles in a two- to two-and-one-half hour period. The terrain is mountainous with a climb of about 1,500 feet in two miles, and we do an awful lot of walking when we're starting a young horse. Maybe 80 percent walking and 20 percent at a slow trot. We gradually increase the percentage of trotting with a young horse until we raise the level to around 50 percent walking and 50 percent walking and 50 percent trotting.

We rarely use the lope as a training aid. We know the concussion is greater on the legs, especially on downgrades, and we use the lope just enough to break the boredom, about one half to one mile. It is, however, okay to lope on a specially prepared track or arena where footing is soft.

We work our horses hard going uphill but we'll break back on speed going downhill—we do our recovering going downhill at the walk. We figure it takes from 4-6 months to leg up a colt for a ride. We try to pace a young horse around 3½ mph to possibly 4 mph to 6 mph for older horses. We train our horses to recover to certain levels, and we train each horse about six to nine hours a week, depending on the horse. Another important part of our training is working cattle in the hills. This provides a lot of slow work which is very helpful.

WH: What about feed?

THROGMORTON: We feed heavy. We feed a high-energy diet when we're in training. This high-fat, high-carbohydrate diet requires a lot of experience in feeding and the average horseman could run into trouble with over-feeding and under-working.

I like high-energy diets because you can feed less bulk and get more energy. You can maintain a horse's condition and you can get the energy into him without increasing the size of his belly.

It takes around four pounds of water to carry one pound of dry hay through a horse's system, and it takes from two to two-and-onehalf pounds of water to carry one pound of grain through the system.

Weight is a very important factor when it comes to performance. It doesn't make any difference where it is, whether it's a jockey on a horse's back, or if it's on his body, belly, legs, or his foot—wherever it is—a pound of weight is a pound of weight. The horse has to carry it over the track or over the trail, and if you can reduce the volume that the horse is carrying, you're going to improve his ability to perform. It's that simple.

WH: What is the actual mixture of your feed?

THROGMORTON: A local feed company mixes a special batch for us according to our specifications: 800 pounds of corn, 400 pounds of barley, 400 pounds of oats, 100 pounds of bran, 7 percent molasses, 3 percent salt, and some linseed or cottonseed oil meal plus dicalcium phosphate. We make it high fat by adding peanut or corn oil.

Also, most horses have to consume at least eight pounds of roughage a day. We usually feed a combination of barley or wheat hay and a trace of alfalfa hay. Basically, we stay with our grain hays.

I don't think alfalfa for competitive or endurance horses is really the best hay. It's too high in protein. You find that those horses that are on high levels of protein feed are the ones that develop excessive dehydration, acidosis, and lose electrolytes during prolonged stress.

Horses on alfalfa will drink a lot more water—they sweat a lot more, too.

If you feed fats, you can prevent dehydration. And I'd like to remind you that I'm talking about horses at high levels of stress, not horses that are ridden lightly and infrequently.

When a horse goes to work, the one thing he doesn't need is an increase in the protein level of his feed; energy demand increases manyfold. And as soon as a horse starts losing weight and losing his bloom, you're going to have to start raising his feed level. We tell the beginner, "Never starve weight off a horse. Ride it off." When a horse is over-worked and underfed, he literally starts burning his muscle up. The hair coat will reflect it: it will become very dry and brittle.

WH: What about tack?

THROGMORTON: We use both English and western, but basically we ride an English saddle with breast collar and the hunt-type martingale; it maintains the saddle in the best position. We try to use just the standard equipment.

WH: Bitting?

THROGMORTON: We work them in a bosal most of the time. Occasionally, we start our young horses off in a hackamore and then later on we'll put them in a bit we call a two-rein. We'll actually have them in a small bosal and regular bit with covered port and roller. We'll stay on the bosal and only use the bit when absolutely necessary. We don't like a bit in the horse's mouth in this type of riding because when we stop we can let them graze or drink from a stream. We don't like any kind of quick-stop bits or long-shank hackamores. They're too severe, and most of the time you don't really need them if your training has been proper at home.

WH: What equipment do you carry on a ride?

THROGMORTON: On an English saddle, you wonder where you're going to put your equipment. We have what we call a banana bag. It's a cantle bag that looks a lot like a banana and has a zipper on one side and comes down to a point on the other side. We tie it across the pommel. It acts like a roll on a western saddle, and it helps when you're going downhill; a hoof pick is essential and so is a knife for any trail rider. If a horse gets tangled up, you can get him loose. Maybe a horse will get his halter or rope caught under a trailer, and if you don't have that knife, you might lose him right there.

We usually carry a plastic eightounce water bottle. We use if for human drinking purposes.

A sponge is a handy item and you can wet down the neck and head of a horse to cool him. We'll also wipe the sweat out of the horse's eyes. You take a horse that is real sweaty around the eyes and you wipe that sweat away, he'll look brighter. We use water to clean the dust and dirt out of the nostrils and our horses feel better.

WH: It sounds as if you've traveled a straight line to success. Have there been many setbacks?

THROGMORTON: I haven't told you about all our mistakes. We've had a few horses tie up. We've lamed one or two. We had a Quarter Horse gelding we thought would be the cat's meow. We started working him too young and he got a bog spavin, and he's now sitting in somebody's pasture. He was going to be our champion; he was the perfect horse—we just worked him too much, too young.

WH: What other things have you learned from competitive riding?

THROGMORTON: I have learned how to evaluate a horse under stress—and I've gained an appreciation for how much stress a horse can take without causing harm.

It has taught me to appreciate the soundness qualities of a horse. I am now much better qualified to appraise the horses I see in my practice each day. The ability to spot lameness, and predict its location in a limb, has proven to be the most valuable lesson learned.

Through competitive riding I have become a better horseman, and a better judge of horses and horsemanship. Anyone who competes will continue to learn as long as they compete. Many experienced horsemen new to competitive trail riding have said, "I've shown horses and worked horses for years, and I thought I knew it all. Then I started trail riding and a whole new world opened up. I know more now after a year of competitive trail riding than I ever knew existed."

WH: What does a horse's pulse and respiration tell you?

THROGMORTON: The pulse and respiration recovery rates are directly related to the horse's ability to withstand stress. They are one of the most valuable tools we have to rapidly measure a horse's condition. When a horse has been subjected to work, the pulse and respiratory rates will increase to above normal rates; when exercise ceases, the P&R rates should return to normal.

The time required to return to normal is related to the level of stress, the existing body temperature, ambient temperature, and humidity. If we use a standard rest period, say ten minutes, then we can learn what level of recovery we can expect from normal working horses. Knowing what the normal recovery rates are for horses and ponies allows me to rapidly evaluate whether a horse should be allowed to continue in competition.

WH: Just from a horse's appearance, can you tell what his P&R will be?

THROGMORTON: Not necessarily. The respiratory rate is, of course, more apparent through observation than is the heart rate. It is difficult to predict what the horse's P&R will be from his external appearance.

In the Tevis ride, for example, some of those horses will recover and their pulse and respiration will be in the normal range, but the horses won't move well. They are unwilling and their attitude is poor. They will be removed from a

ride for just that reason. Often, a rider will sense a problem through communication with the horse rather than through his P&R.

WH: If a horse's P&R are normal but the horse is unwilling, should the rider goad the horse to get him to move faster?

THROGMORTON: No. I don't feel they should because there is real danger in this procedure. I must admit, however, that the real answer to this question is dependent upon a rider knowing his own mount.

I would say that it would be the inexperienced horseman who relies on one criterion to tell what is happening to his horse. If he relies totally on P&R, he can be misled. There are problems that might not be reflected by P&R.

Temperature and humidity have a tremendous effect upon the P&R recovery rates and the ability of a horse to withstand stress or exercise. On a very cool, damp, windy day, the horse's P&R may become very unreliable. A horse may become fatigued without reflecting it in his P&R. He can become super heated inside and not exhibit external signs of stress.

On the other hand, take a hot, humid day. The horse's P&R might remain as elevated as those of a fatigued horse. Yet, the horse's attitude and desire may remain normal.

WH: What has kept you interested in competitive riding?

THROGMORTON: My own education. As a veterinarian and a professional man, I've learned so much about horses, about soundness, and about all phases of the horse business that it's been a great value to me. It's cost me money, but it's taught me enough that it's paid off in the long run. You learn something on each ride.

WH: What have you learned today?

THROGMORTON: We saw the horses come up to the first stop. They all looked bright and eager and not in trouble. Right away you think they're not under stress. All of the P&Rs reflect the same thing and no horse failed to recover. This sense of knowing, the feeling of security that goes along with this, means that I can let these horses continue without any fear of any one of them being injured in any way. I don't know

#### BILL THROGMORTON

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how you can explain this—it's an education, an inner feeling. It's an inner self-confidence that comes with experience of watching horses compete. And I think that's an education just like learning math is an education.

WH: Are you always looking for

something new?

THROGMORTON: Yes. I started out doing P&Rs with George Cardinet III and it was his original idea. I just went along to help him and it got me started.

Today, I know what to expect and how to read P&R and how to interpret them. But we're still trying to fit other criterion of judging and conditioning into the program. For instance, dehydration. There seems to be a paradox; the horses that dehydrate the least seem to be the fattest. Some horses that are in better physical condition will have a tendency to dehydrate more. So we have to try and figure out where dehydration fits into the overall scheme of measuring and conditioning. We must also answer the questions surrounding thumps, cyanosis, capillary refill, and scleral injection.

WH: Would you say your contribution to distance riding has affected veterinary science?

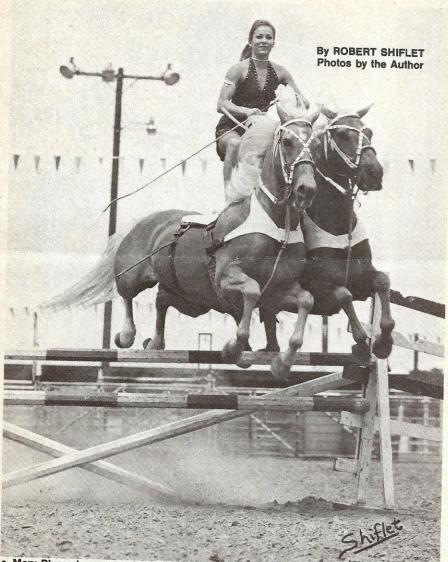
THROGMORTON: Hopefully. When we started this in 1961, we were trying to find some objective measure of conditioning. Up until that time there was very, very little work being done. You can go back through the literature and find that people were not doing things like we are today. I think my contribution lies mainly in the knowledge I have gained treating certain diseases caused by exhaustion.

While my contribution has been small, I have raised some questions which we veterinarians are all trying to answer. Maybe my questions have helped stimulate new research.

And I think that any veterinarian who is not competing in or judging competitive trail rides is missing the chance of his life to learn something about horses, to get his own education. I firmly believe that. It's a beautiful opportunity.



## Trick Riding - A Family Tradition



Mary Rivers jumps a pair of palominos with a smile to spare.



 Dennis Rivers exhibits the showmanship that is a family tradition.



 A good-sized jump, but not too much for Mary and her Roman team.

RADITIONALLY, the palomino has been the "beauty" horse of all colors, and golden horses have often been used as trick and show horses. The glistening gold color dazzles the audiences.

For Dennis and Mary Rivers, McIntosh, Fla., training and showing palomino trick horses was not a new adventure, but rather the continuation of a family tradition started by Dennis' father, Jonny Rivers. The senior Rivers is the originator of Jonny Rivers Golden Horse Troupe, headquartered in Camdenton, Missouri.

Dennis breaks, trains, and books his palominos in many Professional Rodeo Cowboy Association rodeos from coast to coast annually and, along with his wife, Mary, travels with four golden horses the majority of the year with their feature acts.

The "Dancing Horse Act" by Jonny Rivers is being carried on by Dennis and his American Saddlebred, Rambling Gold. Mary Roman-rides her fast-galloping horses with fiery perfection, going over a four-foot jump and finishing with a burst of speed around the arena.

Another act offered by Dennis is the "Desert Drama," which features Rambling Gold. This act is a story about a cowboy and his faithful steed crossing the desert in search of water. It is highlighted by the trials and tribulations they endure, until finally the end is inevitable. As the cowboy drops to the ground, his faithful horse lays down beside him and they cross the "last great divide" together.

Through the summer months, Dennis and Mary, along with their infant son Justin, are joined by Dennis' daughters. Twelve-year old Kim and nine-year-old Tesha are already on their way to careers as trick riders, Roman riders, and jumping horse riders.

During the off-season, Mary and Dennis train many show horses for people all over the country. Mary trains jumping and dressage horses, while Dennis applies his amazing ability as a trick

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