Tools of the Trade

Gro-Trac® adds a new dimension to young horse management

Pitchforks, posthole diggers, knowledgeable personnel, and other tools all have their place on breeding farms. But in this technologically advanced world, farm managers seek as many advantages as possible to ensure their young stock have a head start in life. Farm managers affiliated with Kentucky Equine Research (KER) have a tool at their disposal that helps them grow their horses slowly and steadily—the safest way possible—and that tool is Gro-Trac.

PHOTOGRAPHS | MARK LLEWELLYN

Five years ago readers of Equinews followed the growth of these two colts over the course of several months. Gro-Trac was used to monitor their height and weight, allowing readers to compare their growth with thousands of other young horses of similar age and sex.

Introduced by KER in 2002, Gro-Trac is an equine growth-tracking program that allows breeders to compare the growth rates of their young stock with those of thousands of other young horses. Monthly weigh-ins alert farm managers when horses are growing too quickly. When this occurs, appropriate adjustment can be made to the horse's diet to slow growth and avoid the possible development of orthopedic problems.

Joe Pagan, PhD, founder and president of KER, and Steve Caddel of Farmers Feed Mill laid the foundation for the program almost 15 years ago when they began weighing and measuring the height of weanlings and yearlings across central Kentucky. Early measurements formed the foundation of the program, but thousands

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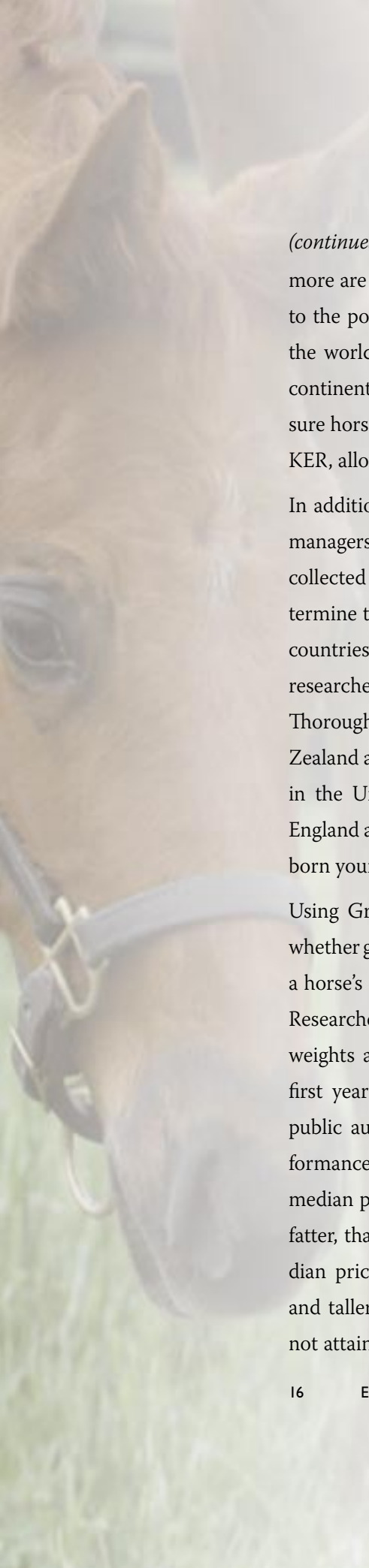

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more are added annually, thanks in large part to the popularity of the program throughout the world. Horsemen in 20 countries on six continents are now using the program to ensure horses grow steadily. They funnel data to KER, allowing the database to grow.

In addition to being a practical tool for farm managers, the measurements that have been collected over the years are analyzed to determine trends in growth of horses in several countries. Without this volume of data, KER researchers would not know, for example, that Thoroughbreds raised in Australia and New Zealand are on average larger than those born in the United States, or that those bred in England are generally smaller than American-born youngsters.

Using Gro-Trac data, KER also investigated whether growth was influential in determining a horse's commercial value and future career. Researchers accomplished this by recording weights and heights from birth through the first year of life, obtaining sale prices from public auctions, and tracking racetrack performance. Yearlings that sold higher than the median price were heavier and taller, but not fatter, than yearlings that sold below the median price. Sold yearlings were also heavier and taller than those listed as RNA (reserve not attained), and fewer lightweight yearlings were sold compared to the heaviest yearlings.

While KER has gathered interesting statistics from sales results, how do these results foretell racing performance? Research at KER has shown that yearling size can often predict athletic success. Scientists recently analyzed the growth and racing performance records of nearly 4,000 American Thoroughbreds to determine if certain characteristics affect the odds of success as a racehorse. Findings suggest some significant trends between growth and racing success. Smaller horses are more likely to start as two-year-olds and have more career starts; however, elite performers (graded stakes winners, grade-1 stakes winners, and those earning more than one million dollars) tend to be taller and heavier.

Because of the dynamic nature of the dataset, this work can be repeated as often as KER researchers choose.

No other management tool monitors growth as completely as Gro-Trac. The creation of Gro-Trac represents the melding of old-fashioned horse sense and modern technology, and use of the software fine-tunes the management of young horses as never before.

For more information on Gro-Trac or the studies mentioned in this article, please contact KER at 859-873-1988 or info@ker.com.

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