



Train Smarter Not Harder

Training and conditioning the horse is an art form that has been developed and advanced over hundreds of years. As science and technology progress information becomes available which can be used to improve a training regimes and in turn performance.

The horses' heart rate can be measured using a heart rate monitor to gauge fitness levels and assess training programs. This information can minimize injury by avoiding overloading and fatigue, but also to ensure the horse is being suitable stressed to increase condition.

Knowing your horses normal resting heart rate is useful tool as an elevated heart rate can indicate that the horse is in pain, under stress or suffering from an illness.

The horses heart commonly referred to as the “engine” is vitally important to a horses performance. The horse has a maximal heart rate between 200 and 240 beats per minute (bpm) The maximal heart rate can not be increase with training, however the resting heart rate can be lowered and the recovery rate can improve with a sound training regime.

Using a fitted heart rate monitor when training allows the trainer to know what level the horse is working at. On average, if the Heart Rate is less than 150 bpm the horse is working aerobically, so there is enough oxygen transported around the body to aid energy production. When the horse is pushed to work harder and the heart rate exceeds 150 bpm the horses muscles are working too hard to rely on oxygen to burn fuel known as anaerobic respiration.

Recovery rates are used to measure how the horse is responding to the training program. The heart rate should be taken soon after fast work and again after a set time of around 5 minutes. These 2 results should be recorded and compared to the next training session. If the recovery rate is improving the horse is ready to move up to the next level of training.

An on board heart rate monitor can be used to carry out a velocity test (Vhr). This involves exercising the horses to get to a given heart rate then record the set distance and the time it takes the horse to cover that distance. You can use the following formula to equate the Vhr:

$$\text{Vhr} = \frac{\text{Distance Traveled}}{\text{Time}}$$

As the horse becomes fitter a higher Vhr result will be reached for that given heart rate. The recovery rate should be used in conjunction with the Vhr to ensure the horse is not being overstressed by the workload.

In summary using a heart rate monitor you can:

- Measure fitness
- Carry out interval training
- Record Heart Rates during a training session
- Know how hard a horse is working when swimming
- How a horse responds to new equipment/training methods ie Simulated Altitude Training
- Have a more scientific approach to training.

Heart Rate Monitors range from the most basic hand held monitor to on board monitors which store information for downloading onto computers. Heart rate monitors are easy to use, give accurate readings and eliminate human error.