Conditioning Your Horse

Buy a stethoscope. In order to gauge and improve the degree of equine conditioning, learn to monitor and understand some basic measures of metabolic function. Conditioning will not improve without periodic increases in the amount of stress the horses' body is asked to handle. The secret to successful conditioning is to stress the body enough to force it to remodel into a stronger, fitter being, without increasing the stress on the body to the point of distress.

Soft tissue can be remodeled in six months to one year. In other words, your horse's muscles, including the heart muscle, can soon be conditioned to make him go as fast as he's ever likely to be able to go. However, it takes the semi-hard tendons and ligaments one to two years to remodel, and bone – up to three years! That first year of conditioning, your horse has more heart than legs. Your job is not to ask him how fast and for how long he feels like galloping, rather, to work him long and slow, and with progressive increase.

The essence of conditioning is to get the horse's body to utilize more oxygen, more efficiently. Use your stethoscope to count the number of heartbeats per minute. Start at a normal resting horse, which should have a pulse rate of **32-40 BPM**. Promising individuals that are good prospects for sports requiring sustained cardiac output have resting heart rates from 26-30 BPM.

The diaphragm of the stethoscope needs to be placed on the horse's left side, in the girth area, just behind and slightly above the point of the elbow. Wait for a few minutes until the horse becomes accustomed to your invasion and his heart rate stabilizes. Each "lub-dub" your hear is counted as one heartbeat. Count for exactly 15 seconds, and then multiply by 4 to get the BPM.

Horses have an absolutely amazing cardiac capacity. At maximum, their resting BPM can be multiplied by a factor of 8-10. So if a horse's resting BPM is 26, a conditioned horse could work to a maximum of 260 BPM for a short period! Most efficient, however, is for horses to work aerobically at a BPM of 120-160. **Within 10-15 minutes of resting, the fit horse's BPM is back to the low 60's**.

TEST

After a typical brisk workout lasting a good hour, take your horse's BPM immediately upon stopping, and continue to monitor it every few minutes until it is down to 64 BPM.

30 minutes is too long to get to that point – you are working him too hard for his degree of conditioning. Back off, find the level that he can handle, and gradually increase the duration and intensity from there.

If it only takes 10 minutes for his BPM to drop – you are not furthering his conditioning. You need to increase the duration and intensity of his workouts, and continue to monitor his BPM.

BEGIN

Conduct your horse's workouts 3-4 times per week, with quiet hacks or non-stressful arena work 1-2 days per week. It takes about 1 month for your horse to achieve significant improvements. After your horse is fit, you can reduce the work to 2-3 times per week of just quiet hacks or non-stressful arena work.

Remember when starting a horse in January, you will need twice as much warm up time and twice as much cool down time. The benefits of warm-up period are three-fold. The horse's body temperature is raised and blood flow is increased to working muscles. As a result, the muscles and tendons are loosened which increases the range of motion and helps avoid pulling or tearing of tendons and ligaments. In addition, the muscles are warmed up allowing them to accommodate harder work by more adequately relaxing and contracting. Finally, a moderate warm-up will better prepare the horse to dissipate heat during intense

exercise. A successful warm-up routine consists of walking the horse for five minutes and then trotting for five minutes before moving on to more demanding work. Multiply that by 2 for winter work.

Just as important as the warm-up is the cool down. This is light work that will gradually bring the horse back to a resting state. Generally this is accomplished by simply reversing the order of the warm-up (five minutes of trotting followed by five minutes of walking). The importance of the cool-down period is that the slower work helps the blood remove lactic acid from the horse's muscles. This is necessary to minimize stiffness and soreness in the horse day after it's workout.

Remember that the horse's recovery heart rate must also be determined ten to fifteen minutes post-ride. Furthermore, the horse should be again visually evaluated for injury, soreness or lameness.

Watch for dangers: attitude, structural soundness, heat, etc. Back off if you notice any of these signs. Dehydration is your greatest danger. Horses dissipate heat by shunting blood to peripheral blood vessels for body heat to be radiated off – evaporation due to sweating.

The fluid component of horse sweat is taken from intra- and extra-cellular fluids, from gut contents, and from blood itself. The skin loses elasticity, becoming more like parchment, gut motility slows down, and the blood actually gets thicker. Your vet can teach you simple tests to check for dehydration by monitoring skin response, capillary refill time, gut sounds, and quality of mucous membranes.

When at rest, a horse needs 5-6 gallons of water per day. When working at length in hot weather, he may drink up to 20 gallons or more per day! A dehydrated, hot horse needs to drink quantities of water with the chill taken off, and then needs to have his salts (electrolytes) replenished. While riding, allow the horse to drink whenever the opportunity occurs.

After the ride, walk the horse around a bit while he is cooling off, so he does not become stiff, but pause frequently for him to drink his fill. Do not make him wait until you decide he is cool and put him back in his stall to take a drink. At that point, he will be in danger of gulping too much at once, and will not have the advantage of natural movement to aid in dissipating the water.

END

The training program of most horses will inevitably be interrupted for any number of reasons (adverse weather, an end to a competitive season, injury, or sickness). When a horse ceases exercise training, it loses fitness. This loss of fitness is referred to as detraining. The rate at which cardiovascular fitness, musculoskeletal strength and suppleness are lost determines the time required to recondition the horse following a layoff.

Horses that have been in training for several months and then taken out of training for less than a month experience a minimal loss of cardio fitness. Reintroduce the workload gradually over a period of several days before resuming the previous work schedule.

A longer layoff of more than a month creates great loss of cardiovascular condition, as well as musculoskeletal strength. Cardio fitness is regained relatively quickly; the strength of muscles, bones, tendons and ligaments is regained relatively slowly. As a rule of thumb, for every month laid off beyond the first month, the horse will need a month’s reconditioning.

When you put your horse up after a heavy season of showing or trail riding, a baseline level of fitness can be maintained during the off-season by performing cardio workouts twice per week at a reduced intensity and duration. If a baseline level of fitness is maintained through a reduced work schedule, reconditioning

proceeds much more rapidly the following season. It is not recommended that horses be rested completely (except in cases of injury) because large oscillations in fitness are detrimental to long-term soundness. It takes longer to recondition the older horse, so it is particularly important to maintain their fitness in the off-season.