

Heat Policy

Factors affecting the ability to remain cool for both horses and riders

NSW Pony Club has adopted the same general principles as the Australian Animal Welfare Strategy. - Hot Weather Procedures.

The following weather conditions (and forecasts) should be taken into consideration when making any decision regarding an equestrian competition

The following protocols for extreme conditions applies for all Pony Club competitions:-

- When the temperature exceeded 28 degrees with a humidity level of 60% then ALL riders must take off their jumpers and a summer uniform edict is issued.
- When not competing the riders should be encouraged to dismount and stand in the shade
- Should the riders be wearing a dark helmet they should be encouraged to remove it when dismounted.

Consideration should also be given to whether a mounted presentation is appropriate when there is adverse weather conditions present be it hot, cold, wet or windy.

As an organisation we are aware that it is a lot more difficult for the horse to control its body temperature, compared to riders because of the difference in body mass compared to skin surface. (and also they don't wear Jumpers)

The following factors must be taken into consideration when deciding to continue the event.

Horse

1. Technical Delegate (TD) and the organising committee should take all environmental factors into consideration when making a decision regarding the continuation of the event.
2. The length of the period of time of the exertion on the horse. e.g. Bending race compared to a Cross Country
3. The actual timing of the periods of exertion e.g. Cross Country early or late in the day
4. In Showjumping, Eventing and Equitation we should consider
 - i. the number of efforts required on course
 - ii. the time between each round
 - iii. limiting the number of jumps in the practise arena
 - iv. A cooling off area should always be available after Cross Country where riders walk their horses for 5-10 minutes with the horse's girth and noseband loosened.

Adequate access to water should be provided to cool the horses down.

In addition the following information should be given to all riders at the event

Riders being aware of the effect of climate conditions on the horse e.g. not sitting (using the horse as a chair) on the horse when they are not in competition mode. At this point the horse should be held in the shade (if possible) and have its girth and nose band loosened.

When horses are being hosed the hosing should commence at the underbelly and legs. The reason for this being that a horse heats from the outside in and its vital organs are closest to its underbelly. In addition the excess water should be scraped from the horse after about 30 seconds in order for the hosing to be most effective to allow for evaporation.

5. In all equine activities we should encourage the use of grass arenas in hot conditions.

Riders

Sweating is the body's defence against over-heating and water is important for the proper functioning of the circulation and sweat glands and therefore should be regularly replaced. It is universally accepted that hydration before, during and after exercise is important.

On days of extreme weather conditions it is vital that all competitors take the appropriate nutrition as well as water.

Understanding the factors that affect the ability of both horse and rider to stay cool:-

1. **Evaporation**
2. **Convection**
3. **Radiation**
4. **Conduction**

Evaporation: - Skin is cooled when sweat evaporates and this enables heat to be released from deep within the body to the surface. Evaporation is only possible when the air temperature is higher than the body temperature, and sweat can evaporate from the skin. Under reasonable conditions evaporation accounts for 25% of heat loss but during hot dry conditions it can account for up to 80% of heat loss. Environmental conditions such as hot, humid weather conditions limits the body's ability to dissipate heat by evaporation.

Convection: - Heat can be lost from the body when there is a cool breeze (12% of heat loss) but when the air is hotter than the body, heat can be then gained by convection.

Radiation: - Warm objects radiate heat and on a warm day, the sun and the ground will also radiate heat. The bigger the difference between the body's heat and the environment the greater will be the radiated heat loss. Radiation accounts for 60% of heat loss.

Conduction: - This involves transfer of heat to another object by contact and accounts for approximately 3% of heat loss.

The body cools itself by sending blood from the core to the skin where one or all of these processes can take place (Vasodilation) should these processes be unable to be activated then hyperthermia will become a problem.