

***The first question was why change from a bitted bridle in the first place?***

As an equestrian centre dedicated to promoting best practise in coaching and horse management it made sense that we would try to improve the quality of life of the horse. We are constantly reviewing how we do things and how we can improve on what we do. So when we read about the crossover bitless bridle it seemed logical that we would try it out. So we first bought two to try out on two horses who were demonstrating extreme behaviours which were being attributed to wearing a bitted bridle. One horse salivated excessively as well as extreme vertical headshaking. The second pony was extremely difficult to catch and put a bridle on and was becoming quite a problem when coming into jumps as he would very quickly run out of jumps. So these were our 'guinea pigs' so to speak.

***What is a crossover bitless bridle and how does it differ?***

The bitless bridle bears no other resemblance to the pre-existing and traditional bitless bridles, i.e., the hackamores, bosals, and sidepulls. In common with all bitted bridles, the traditional bitless bridles are pain-based in their mechanism. The BB is the only bridle that ensures a pain-free rein aid. It works on an entirely new and different concept compared with all previous bridles. The BB provides, as it were, full service communication, whereas the traditional bitless bridles all have limitations in their ability to provide for rider/horse communication. The hackamores and bosals, for example, make some provision for stopping (though with similar inherent problems to the bit method) but are weak on steering, whereas the sidepulls provide for steering but are weak on stopping.

***How does a crossover bitless bridle vary from a traditional bridle?***

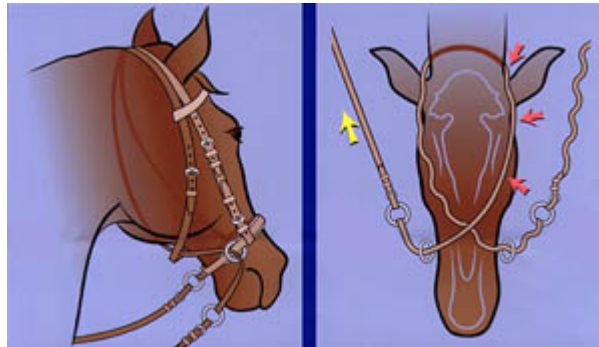
There are a wide variety of bitted bridles available on the market. Irrespective of the bridle type, most bits apply pressure on one of the most sensitive parts of the horse's mouth – the natural cavity between the canine and cheek teeth of the horse. This area is covered by a very thin membrane – in fact the human shin has more skin covering the bone than the horse jaw has membrane. Ironically, when horse owners buy saddles they go to great lengths to ensure that maximum padding is given to protecting the horse's spine. This consideration seems to disappear when bitted bridles are bought and placed into a horse's mouth.

Suffice to say that placing an iron bar into one of the most sensitive areas of a horse's mouth will cause pain. So depending on the severity of the bit **together** with the pressure that is placed on the bit by the rider, will dictate the degree of pain experienced by the horse.

***How can I steer with a crossover bitless bridle?***

Brief pressure on one rein pushes painlessly but persuasively on the opposite half of the head. Horses respond better to being pushed painlessly (nudged) with the Bitless Bridle (over a large surface area) than being pulled painfully by a bit (with highly focused pressure on the sensitive tissues of the mouth). Where the head goes the horse follows. Unlike the effect of a bit, that tends to twist a horse's head, the head stays upright and the turn is more natural and physiologically correct. By comparison with either bits or other bitless bridles (hackamores, bosals and sidepulls), more effective steering is one of the first benefits that riders notice. The Bitless Bridle works with both direct and neck reining

***The question of control - How can I slow and /or stop?***



One of the first questions that people asked and indeed continue to ask is 'how do you control the horse with not bit'. Brief pressure on both reins or alternate pressure on each rein applies a gentle squeeze to the whole of the head and triggers a 'submit' response. Braking is probably attributable to a combination of the calming effect of a whole-head-hug; to initiation of a balancing reflex at the poll; to the stimulation of areas of special sensitivity behind the ears; and to painless pressure across the bridge of the nose. The "brakes" are more reliable than those provided by the bit. First, bit-induced pain causes many a horse to bolt rather than brake. Secondly, at no time can the horse deprive the rider of all means of communication by gripping the bit between its teeth or under its tongue. Unlike the mechanics of the bit, hackamore, bosal or sidepull, braking is not dependent on pain across the bridge of the nose, poll flexion and obstruction of the airway.

***What happened when we introduced the crossover bitless bridles ?***

The first horse 'Henry' was renowned for spraying his riders with saliva during the lessons. Whilst salivating excessively, he also had a very bad habit of vertical headshaking – again excessively. Although not an excessive problem, he did not particularly like being bridled. So when we introduced the crossover bitless bridle, we noticed that this headshaking and salivating virtually stopped – overnight. In fact the observed behaviours wearing a bitted bridle reduced from 25 behaviours to 3

The second pony 'Rajah' had a worrying habit of seeing a jump and literally bolting and running out. When we introduced the crossover bitless bridle – and having done some re-training so as he did not associate the jump with pain – this became far less of a problem. Although this has not entirely disappeared, it has reduced significantly.

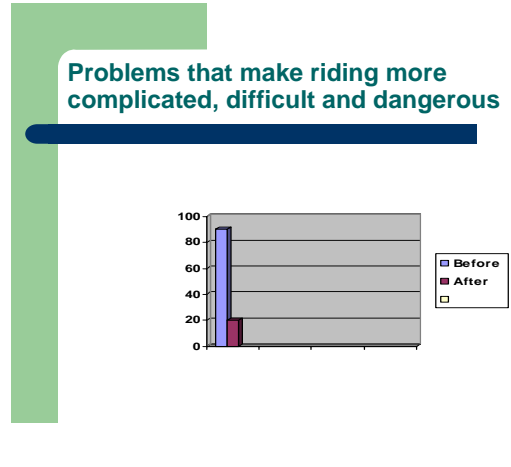
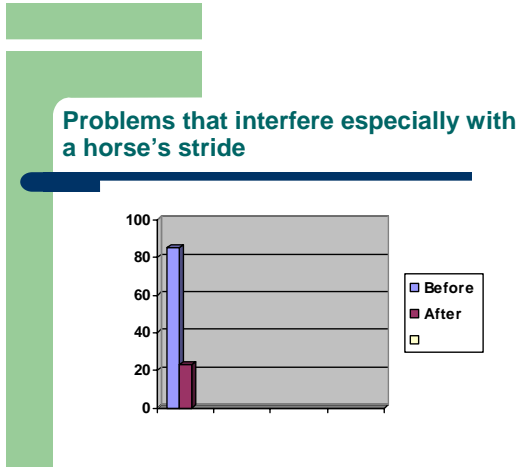
We decided that based on the positive results of Henry and Rajah, that we would continue with two more horses. And so this continued until we had replaced all the bitted bridles. The important thing for us was to continuously review the process and this is why the project took up to 7 months. Each week at our coaches meetings we would review the behaviours, improvements, the fitting, the benefits, etc. We were very aware that safety of the riders had to be the priority and only until we saw that steering and stopping was not an issue could we proceed with the project.

***How were the behaviours measured ?***

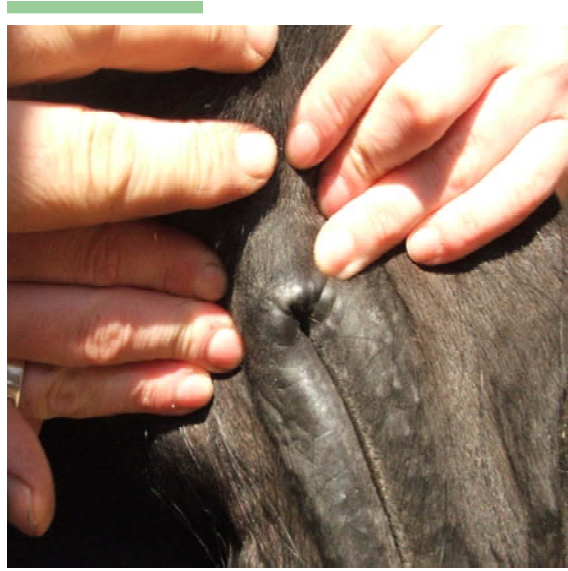
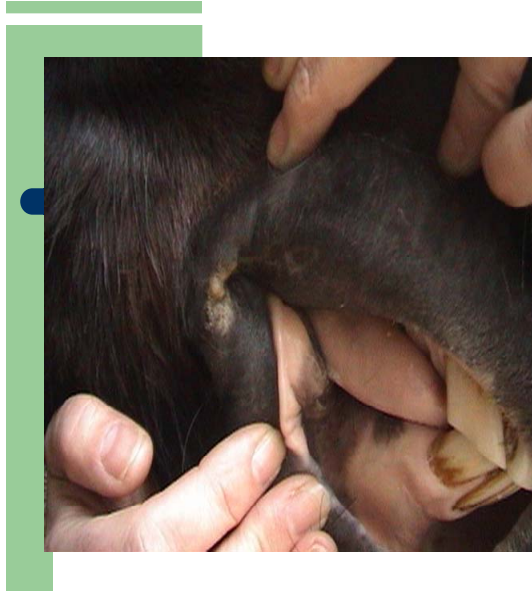
Two people measured each horse/pony's behaviour using the *Behavioral Profile Questionnaire* wearing a bitted bridle and then again wearing a crossover bitless bridle. In addition, up to 6 horses/ponies were filmed pre and post and digital photos were also taken.

The results of some of these are set out below.

The charts show the reduction in behaviours and the last two photos show the difference in a ponies mouth pre and post



**These photos show the mouth of one of the ponies who had wearing a bitted bridle and 6 months after wearing a crossover bitless bridle**



## ***SOME MORE ON THE EFFECTS OF BITTED BRIDLES .....***

### **THE FIVE F'S**

A bit frightens a horse. It causes pain or the fear of pain. Fear is expressed by one or more of the five F's; fright, flight, fight, freeze or facial neuralgia (the headshaking syndrome). Each one of these main categories has its own list of symptoms (see below). Collectively, there are over a hundred symptoms and they interfere with just about every bodily system. Interference with those systems that are vital to athletic performance (the nervous, respiratory, musculoskeletal, and cardiovascular systems) means that the horse is not only in pain and feeling mentally distressed but is additionally handicapped as an athlete. For example, the presence of a bit in the mouth leads to obstruction of the airway in the throat. As striding is synchronized with breathing and as normal striding depends on normal breathing, anything that interferes with breathing also interferes with striding. A horse that is unable to breathe and stride properly cannot run and jump to its full potential. A horse that is in pain and mentally distressed cannot learn in the first instance and neither can it perform with confidence and safety.

**HERE ARE SOME OF THE PROBLEMS THAT THE BITLESS BRIDLE HAS SOLVED** or, to put it a different way, here are some of the distresses, discomforts, uneases and dis-eases that removal of the bit has banished:

**Fright:** Difficult to catch in the paddock; unfriendly in the stable; resistant to being bridled and unbridled; difficult to mount. At exercise, anxious, unpredictable, 'hot,' nervous, or 'highly-strung'; fearful, shy, spooky, and inclined to panic; tense and stressed; sweats excessively; unfocused on the job in hand; a restless eye or shows the white of its eye; slow to learn or complete lack of progress with training

**Flight:** Difficult to slow or stop; running through the bit and bolting; puts the bit between its teeth and deprives the rider of control; jiggling, prancing, rushing; fidgeting when at rest and when on the move; hair-trigger response to the hand aids; runs wild on the lunge rein

**Fight:** Bucking; rearing; spinning; aggressive, argumentative, confrontational, resistant, bossy, cranky, surly, resentful, adversarial, and angry; hard-mouthed heavy on the forehand and a 'puller'; difficult to steer in one or both directions; refusal to rein back; pig rooting, yawning, and crossing the jaws; reluctance to maintain canter; stiff-necked; refusal to lead on the correct leg

**Freeze:** These are responses to pain or fear that, for evolutionary reasons, are particularly likely to occur in donkeys and mules, but they also occur in horses. For example, refusal to leave the herd; refusal to go forward (napping); backing-up; lack of courage and confidence, including random, last-minute refusal at jumps; lack of hind-end impulsion; and a tendency to develop muscle cramps (tying-up, azoturia, exertional rhabdomyolysis)

**Facial Neuralgia** (the headshaking syndrome): At exercise an open mouth; head tossing or 'flipping the nose'; above the bit and 'star-gazing'; behind the bit and overbent; rubbing

## Crossover Bitless Bridle Research Project

muzzle or face on foreleg; striking at muzzle with foreleg; rapid and sometimes noisy blinking; hypersensitive to bright light, wind or rain; sneezing and snorting; grazing on the fly; attempts to bite horses alongside, grabs the shank of the bit or the rider's boots; watery eyes and nasal discharge; grinds teeth; tilts head; twitching of the cheek muscles. At rest may exhibit a general head shyness or be difficult to handle specifically around the mouth or ears; difficult to clip or hose around the head; When being led in hand after exercise, rubs its head vigorously against the handler.

**General unhappiness:** Lack of finesse in control; 'lazy,' dull, and subdued (i.e. phlegmatically resigned to chronic pain); 'ring sour'; a slow walker; tires prematurely; ears pinned at exercise; heads for the stable at every opportunity; tail swishing

**Breathing difficulties (asphyxia and suffocation):** Excessive poll flexion; retracts its tongue behind the bit, 'swallows its tongue' (elevation and dorsal displacement of the soft palate); thick-winded or an obvious 'roarer'; gurgling or choking-up; tongue over the bit; epiglottal entrapment; collapse and deformity of the windpipe ('scabbard' trachea); asphyxia-induced pulmonary edema ('bleeding' or exercise-induced pulmonary hemorrhage); coughing at exercise; small airway disease (bronchitis, bronchiolitis, or recurrent airway disease)

**Interference with stride, gait, and motion:** Tense neck; stiff or choppy stride; short stride; incoordination (sometimes diagnose as equine protozoal myelitis or EPM); stumbling; heavy on the forehand; 'interfering' or 'forging' (striking foreleg with hind hoof); inverted frame (high head carriage, hollow back); toe scuffing; refusal to maintain canter; false collection; lack of self-carriage. Shortage of oxygen (asphyxia) initiates a cascade of events that are particularly likely to occur in racehorses but are by no means limited to this sport. One event leads to another. For example, premature fatigue leads to false steps; false steps lead to breakdowns; fatigue and loss of muscle tone leads to chip fractures, damaged joints and strained tendons; Fatigue also leads to falls, falls to major long bone fractures, and these to unavoidable euthanasia.

**Mouth and dental problems:** Fractured jaws (from falls or other bit-induced accidents); star fractures of the bars of the mouth leading to the shedding of dead bone (rare); bone spur formation on the bars of the mouth (common); severe erosion of the first cheek tooth in the lower jaw (common) as the result of a horse defending itself by gripping the bit between its teeth (common); erosion of the second and third cheek teeth from the same cause (slightly less common); premature loss of the foregoing cheek teeth from the same cause; sore mouth; cut lips; lacerated or amputated tongue; lip sarcoids; sharp enamel edges on cheek teeth in the upper jaw, leading to cheek ulcers; the same on the lower jaw leading to laceration of the side of the tongue; loss of appetite; reluctance to drink on trail rides, leading to dehydration; tongue lolling at exercise.

**Effect on the rider:**

Use of a bit or bits makes riding unnecessarily difficult, disappointing and dangerous. Because riders are often unaware of the cause of these problems and, therefore, do not know how to treat them, they become discouraged in a number of different ways. They may, for example:

Become convinced that they simply do not have the skills to become good riders. Instead of blaming their tools (the bits), which they should, they develop

A sense of frustration with their apparent inability to master the art of equitation, or

A burgeoning annoyance bordering on anger with the horse, or

An increasing reluctance to exercise the horse on a regular basis and the generation of displacement activities (excuses), or

They despair of ever achieving that harmony between horse and rider that is the pinnacle of equitation, or

They cease to get pleasure from riding, or

They lose confidence, become afraid of riding, and consider giving it up altogether, or

They decide to sell a horse that appears to have incurable problems and buy another, or

They experience economic embarrassment from doomed attempts to overcome problems by means other than removal of the cause (the only logical approach to treatment), or

They suffer personal injury (anything from a fractured collar bone to sudden death)

SO MUCH FOR THE NEGATIVE ASPECTS OF THE BIT. Let's now consider the ...

**POSITIVE ASPECTS OF THE BITLESS BRIDLE** This new approach to equitation enables you to avoid the above and permits you to be kinder to your horse; improve your horse's welfare and its mental and physical balance; avoid confusing your horse by expecting it to eat and exercise simultaneously (the effect of using a bit); have better "brakes" (bits induce bolting); enjoy smoother transitions; lengthen your horse's stride and, therefore, increase its speed; have less fidgeting; a much calmer, more relaxed horse and one that listens better to the aids; reduce the stress of exercise for you and your horse; dispense with tongue-ties and dropped nosebands; enables your horse to get more oxygen and generate more spirit, vigor and stamina; make faster progress with training; obtain better performance; improve your own safety and that of your horse; communicate more effectively and in a manner more acceptable to your horse; avoid so much lathering-up, foaming at the mouth and slobbering; allow your horse to develop a more graceful action, with a more rounded outline and better engagement; reduce the likelihood of lameness and breakdowns (from lack of oxygen, fatigue and heaviness on the forehead); reduce the likelihood of bleeding from the lungs and sudden death at exercise (caused by upper airway obstruction; put a novice on a fully-trained horse without fearing that its mouth may be damaged, and so enable a trained horse to teach an untrained rider; establish a better partnership; obtain more cooperation and have a happier horse.