

FOUNDATION TRAINING FROM THREE-WEEK-OLD THOROUGHBRED FOALS FOR RACING

L.M. Wills, S.M. King, K.A. Brider and S.P. Wills

Equus Education (NZ) Ltd, PO Box 690, Cambridge 3450, New Zealand

leigh@equuseducation.com

Equus Education (NZ) Ltd applies the ten ISES principles of learning theory to initiate foundation behavior of foals for the racing industry. Over the past decade 2,375 foals have been successfully educated in 18,000 training sessions without injury to foals, mares or handlers. The basic training is a collaborative process involving the mare and two handlers. Communication of an ongoing training program for farm staff and other industry professionals is required to maximize the benefits of the method. Behavioural science validates the training process and communication with stakeholders facilitates change in practices.

Traditionally, the first handling of foals in New Zealand occurs at four to six months of age, as this is when the farm staff has time to work with them. A new approach allowed Equus Education (NZ) Ltd to work with much younger foals. Foals are trained for 6-9 sessions at 1-3-day intervals for about 10 to 30 minutes. They learn to be approached, haltered, touched all over, led and have their feet picked up by any experienced handler. In order to match a foal's cognitive levels, training does not start earlier than three weeks of age. By synchronizing training with the socialization phase of the foal's development, they are naturally looking to explore their environment and create new relationships, and there is less chance of interfering with the mare/foal bond.

The foals are habituated to the handler's presence, touch and relevant environmental stimuli. They learn to be led by utilizing social facilitation and by classical conditioning of cues. This is followed by operant conditioning of pressure variations of cues and tactile positive reinforcement. 'Go' is signaled by forward pressure on the halter. 'Stop/slow down' is signaled by halter pressure across the foal's nose. A left movement with the handler's hand cues a left turn and right movement a right turn. Handlers train one response per signal and minimize the number of signals. It is particularly important that a racehorse has highly developed social skills and understands different contexts of the same signal, as they subsequently need to perform with different horses, handlers, environments and states of arousal.

Between September and December 2016, data were collected on sixty-five foals learning to lead using the above method. All foals learnt the four cues within four training sessions. The median of total repetitions for a 'go' cue attainment from the nearside was 10.5 (range 6 to 19), from the off side 9.4 (range 5 to 16). The 'stop' response attainment from the nearside required 10.2 repetitions (range 6 to 16); and from the off side 9.0 (range 5 to 17).

A 2017 review of equine welfare during exercise included the statement that the horse's aversion to the bit is *"a significant welfare issue that should be addressed."* It is hoped that the foal-training is a step towards addressing this need for the racehorse. If foundation training is established from 3-weeks of age and maintained by farm staff in ensuing months, it seems likely that the non-aversive training of halter cues when young will facilitate the introduction of non-aversive bridle cues for the future racehorse. Such an outcome would improve quality of life for a racehorse and this, in turn, would improve performance. A pilot programme is planned to test this hypothesis.

A foal's subsequent racing career is underpinned by communication and collaboration with the many specialists who are integral to its overall success. Equus Education (NZ) Ltd continues to learn and share knowledge, as change can only occur if all parties concerned are committed.

Lay person message: Equus Education (NZ) Ltd uses learning theory to train foals for the racing industry. Foals learn to be approached, haltered, touched, led and have their feet picked up by any experienced handler. The method involves communicating and collaborating with mares, foals and staff. Foundation behaviors are trained using different contexts of the same signal to anticipate the variables of different handlers, environments and states of arousal.

Key words: Learning theory; Thoroughbred; foal; behavior; training; welfare