



PROGRESSIVE EQUINE BEHAVIOR & TRAINING FORUM

February 23 – 26, 2018
SpringHill Suites, Orlando, FL

SPEAKER SUMMARIES

Saturday Morning Sessions February 24, 2018

Hazeltine Ballroom

Time Speaker, Title, & Summary

8:00 **Liane Preshaw:** *Horse Rescues – How Can We Better Safeguard Horse Welfare?*

In England and Wales, the welfare of horses is protected by legislation that aims to prevent unnecessary suffering and ensure the horse's needs are met. It is enforced by welfare agencies who play a role in investigating allegations of welfare compromise, and catch/contain, transport and board (care for) horses that have been rescued. Horses regularly have to be rescued in difficult circumstances from challenging and potentially dangerous environments, and due to the debilitated state many horses are found in, physical health is often prioritised over psychological well-being. Anecdotal evidence suggests that rescue personnel may not always recognise behavioural signs of fear, stress or pain, or understand how horses learn, particularly with regards to negative reinforcement. Rescue practices may inadvertently trigger fear responses and behaviours indicative of conflict. This can put human safety at risk and contribute to the development of fearful, dangerous and/or unwanted learned behaviours that require re-training at a later date. Ultimately, such practices may negatively impact on the horse's recovery and affect the organisation's ability to successfully re-home the horse. There is a need for welfare agencies to continue to develop their knowledge and skills in the light of new evidence, particularly with regards to ethology, how horses learn, and ethical behaviour modification. This presentation will evaluate common approaches to handling and training rescued horses in England and Wales, during and post-rescue. It will also explore some approaches being utilised by The Horse Trust's team to facilitate human behaviour change and support continued professional development.

8:30 **Katy Schroeder:** *Courageous Conversations About Equine Welfare Practices: Strategies for Engaging Stakeholders in Difficult Dialogs*

A challenge to advancing best practices in equine welfare is helping horse enthusiasts and industry professionals integrate new knowledge about equine cognition, learning, and behavior. Collaboration among stakeholders is key to productive dialogues. Little research exists regarding

the psychological processes involved in stakeholders' decisions to adopt or dismiss new information that could improve equine welfare. Decisions about equine welfare are partially influenced by individuals' values and beliefs, and the degree to which disconfirming knowledge creates an internal conflict regarding those values and beliefs. In human psychology, this phenomenon is known as cognitive dissonance, and often results in the use of defensive strategies (e.g., minimization or avoidance) to cope with discomfort arising from the conflict. Use of these strategies can be linked to communication breakdowns as well. Thus, it is imperative equine welfare advocates develop specific skills to keep the channels of communication open.

The purpose of this presentation will be to review psychological barriers and related behaviors associated with individuals' difficulties integrating and applying new information about equine welfare best practices. The presenter will also introduce attendees to the major concepts of Motivational Interviewing (MI), an evidence-based communication strategy recently utilized to improve veterinarian-livestock manager conversations about animal healthcare. MI principles will be discussed in the context of engaging equine industry stakeholders in difficult conversations about equine welfare.

9:00 **Tammy Donaldson, Lauren Fraser, & Emily Weiss.** Roundtable Panel: *Risk to Horses in Rescue*

Although the exact number of horses in rescues is unknown, thousands of horses enter rescue each year. Although many horses find refuge in horse rescue, many are still at risk. According to a survey by the Unwanted Horse Council in 2009, 63% of equine rescues/retirement facilities are operating at capacity. Anecdotal reports from individual horse rescues estimate this percentage to be even higher. Rescues provide an invaluable service to unhomeed horses but despite their best efforts, horses face risks to their welfare and a continued risk of entering the slaughter pipeline. A number of issues contribute to this risk including; unregulated rescues that do not have the knowledge or resources to assure appropriate welfare, rescues that suffer from internal conflict, mismanagement or compassion fatigue, lack of cooperation among rescues, lack of clear guidelines about euthanasia decisions, and lack of knowledge or ability to find appropriate adopters for the horses in their care. As a horse behavior professional there are ways that you can help to assure these rescues can reduce the risks of horses in their care.

9:45 Break

10:00 **Antonia Henderson:** *What is the "Happy Equine Athlete"? Identifying, Assessing, and Enabling Sport Horse Welfare*

The Fédération Equestre Internationale (FEI) Code of Conduct for the Welfare of the Horse strives to regulate standards where "the welfare of the horse [is] paramount" ... and "never subordinated to competitive or commercial influences (2014, p. 8)." Discipline-specific rules aspire to "the development of a happy equine athlete". This lofty goal, albeit admirable, is fraught with vagaries of definition, measurement, and enforcement, and ultimately does not serve our horses well.

Most horse industry professionals believe that they can determine when their horse is happy; however, research suggests that owners and professionals alike are not skilled at picking up indicators of compromised equine welfare (e.g. Lesimple & Hausberger, 2014). Subtle or

non-existent equine behavioural cues, human desensitization to, and moral disengagement from equine suffering, and ignorance about what well-being looks like, all challenge the ability to accurately identify equine happiness.

I will discuss why our understanding of horse happiness is prone to error, and how we might employ objective measurement tools to gauge it (such as rein tension devices, girth sensors measuring heart rate variability (Ternström & Paul McGreevy, 2012), and other physiological markers of distress). Finally, I explore how we might take positive steps to improve it with knowledge gleaned through applied research and the fundamental principles of learning theory.

I will argue that calling competition horses “athletes” – happy or otherwise – is problematic, as it implicates the horse as a willing participant in the desire, effort, and self-sacrifice that goes into the human goal of winning (McLean & McGreevy, 2010; Henderson, 2012). Governing bodies such as the FEI would be well advised to avoid value-laden terms like “happy athlete” and focus instead on legislating, measuring, and enforcing tangible objective criteria of equine welfare.

10:30 **Camie Heleski:** *Welfare-Related Issues in the Thoroughbred Racing Industry...and Why I Still Believe It Passes Ethical Assessment Scrutiny*

There is little doubt that horseracing currently suffers from a public perception problem. Even amongst fellow horsepersons, I hear the following (Note – these are opinions collected, not necessarily my own): too many catastrophic breakdowns, 2-year-olds shouldn’t race, whips are used excessively, drug use is rampant, horses are ‘thrown away’ after their racing careers. According to information from the Equine Injury Database, the fatality rate for 2016 was 1.54/1,000 starts. While this number is not perfect, it has been steadily ‘improving’ and tracks work with surface experts to enhance safety. We will discuss how this compares with injury/wastage rates in other disciplines. It is popular to state that 2-year-olds shouldn’t be racing, and yet data support that 2-yr-olds have fewer catastrophic injuries than 3yos, which have fewer than 4yos. Bone physiologists recommend that connective tissue adapts best to speed work in young horses. Light racing of 2yos is likely in the best interest of their physiology. Research by McGreevy and others has provided evidence to the perception that whip use in racehorses is a negative. Many stakeholders are agreeing that whips can be carried for safety, but there is minimal justification for using whips on (potentially) fatigued horses. There are legitimate reasons why certain medications are beneficial to racehorses, but largely because of perception, many stakeholders are now advocating that race day medication needs to stop. It should be noted, though, drug testing in racing is more comprehensive than most other disciplines. In recent years, aftercare efforts have increased dramatically. The industry has fully embraced this crucial piece of their industry. We will also discuss different life stages of Thoroughbreds that are viewed primarily in a positive light. Given the above, we will conduct an ethical assessment of the Thoroughbred racing industry using guidelines from earlier work (Heleski and Anthony).

11:00 **Orla Doherty:** *Noseband Usage in the Competition Horse – A Research Journey*

Training of horses relies heavily on the use of negative reinforcement, i.e. the application and release of pressure to train desired responses in the horse. Excess pressure on tissue may cause pain and tissue damage. However little research has been carried out measuring the levels of pressure applied and potential deleterious effects to the horse. As knowledge of animal welfare increases, concern has arisen in recent years regarding the lack of information available on

possible threats to welfare through common training practices, including equipment being used, and its mode of usage. This has led to a growing interest in applied research, investigating the effect of equipment commonly used in equestrian sports. This lecture will describe recent research carried out by the author and other research groups into commonly used tack on horses, in particular the noseband, investigating modes of usage, resultant pressures and potential effects on the ridden horse. Regulations related to the use of nosebands will also be discussed.

11:30 **Tim McGaffic and Virginia Chase Elder: *More Questions than Answers***

Most if not all the presentations during the forum will address one or more of the values listed by the organizers and most deal with some training or core philosophy that can be applied through the belief of an individual trainer, teacher or other person that is dealing with horses. As individuals we beat the drum of change with small victories here and there but as a dynamic movement of change for the betterment of horses we seem to be stuck in the horse latitudes. The demographics of the horse industry indicate a troubling decline and the trends of modern living reveal cracks in the horse world as we know it today. The information we embody is readily available, for the most part, on the internet or through some university or individual. As studies show, for example in the case of climate change, often more facts simply increase the resistance to make the change. What motivates people and how do we convince today's horse enthusiasts to think past their resistance to even consider a science-based approach to training?

What can we do as individuals and collectively that will make a difference in motivating trainers, riders, and horse owners to be receptive and open to the science of learning? What are your visions of possibilities to advance the cause today while being mindful of the changing demographics that are not in favor of the horse. As advocates do we need to embrace a more robust activism to initiate a change? Do we as a collective group need to modernize our thinking and perspective to facilitate such change?

Saturday Afternoon Sessions February 24, 2018

Hazeltine Ballroom

Time Speaker, Title, & Summary

1:00 **Sue McDonnell: *Operant Learning Efficiency in Foals***

While there is a steadily growing body of scientific work exploring equine cognition, only a few studies so far have focused on learning in foals and juveniles. So far, foal learning ability and efficiency have been assessed in simple discrimination or discrimination-reversal learning in a positive reinforcement-based operant paradigm (in its simplest form essentially target training). Evidence to date suggests that learning in this paradigm 1) is relatively efficient in foals compared to adults, with no difference between foals evaluated at 6 weeks to 3 months of age compared to those at 3 to 5 months of age, and with suggestion of extraordinary efficiency in neonates; 2) is more efficient for fillies compared to colts, and 3) is heritable, or at least runs in family lines. We hope to continue on to evaluate positive reinforcement-based operant conditioning as an effective approach to establishing an early healthy human-animal working/learning relationship that will serve the horse well throughout life. We expect that more published scientific evidence will encourage wider application of systematic learning exercises or "games" to introduce foals to husbandry experiences and age-appropriate skills. This approach also has the potential to serve handlers well by demonstrating the extraordinary efficiency of training of horses of any age with well-performed scientifically established methods. If accepted as an alternative to the

popularized early intensive handling protocols (eg Imprint Training) or for random “lovin on em” style of interaction, we suppose that many of the training and handling behavior problems associated with those techniques could be avoided.

1:30 **Sharon Crowell-Davis:** *Critical Issues in Foal Development*

Puppy socialization classes have become very common. We know that there are certain optimal times for puppies to learn certain social skills and develop stable personalities. Even kitten socialization classes are becoming more and more common, again based on specific knowledge of the kitten’s social development and learning. Why don’t we apply our knowledge of foal development to specifically facilitate optimal emotional stability and friendly social behavior to their own species and to humans? The misnamed “imprint training” of foals has been shown to have little to no effect on behavior when double blind placebo controlled studies are done. There are two main problems with “imprint training”. One is the timing, immediately after birth, which is not the time when the foal undergoes its most significant social development. The second is that it is based on the idea that only one interaction is needed. This is true for real imprinting, such as identifying which individual to follow and suckle from. It is not true for broader issues of complex social behavior and perception of a complex world. Instead, we should focus on the period of socialization in the foal, which is the second and third months of life. During this time the foal is most inquisitive and actively seeks new experiences. Programs need to be developed that focus on optimum socialization during the period of weeks 5 to 12. There are also special needs that must be addressed, such as orphaned foals. During their first month of life, foals need to have access to the feces of mares in early lactation, for consumption. During the second and third months of life colts in particular need exposure to the urine of estrous mares in order to facilitate optimal maturation. Ideas for making optimal use of the 8 week period of maximum socialization will be discussed.

2:00 **Lore Haug, Katherine Houpt, & Carissa Wickens.** Roundtable Panel: *Equine Stereotypic Behaviors.*

Lore Haug- *Equine Stereotypies: What We Know About Neurobiology*

Equine stereotypies, particularly cribbing, are of great interest to both amateur and professional equestrians. The more thoroughly we understand the etiology of these behaviors, the more we can diminish the stigma on horses with this problem as well as devise better programs for prevention and treatment. Research in humans and other animals has identified various neurobiological correlations in different types of OCD or stereotypic behaviors. The serotonin and dopamine systems, among others, are important on a neurochemical level. Neuroimaging studies show pathology in the basal ganglia—frontal lobe pathways. This brief discussion will highlight some of the current research as well as hypotheses on differing presentations of abnormal repetitive behaviors and their underlying neuroanatomy and neurochemistry.

Katherine Houpt – Importance of Cribbing to the Horse

Cribbing is a stereotypic behavior that afflicts 5% of the US equine population. Thoroughbreds are most at risk. We were interested in how often and how motivated a horse was to crib. They crib 340 times a day. We used an operant conditioning paradigm to determine how hard a horse would work to get access to a cribbing surface. The horse would press a panel 35 times to be able to

crib; the same effort they would expend to obtain sweet feed. They exerted 29 kg of force at each crib bite. To answer the question of the welfare of horses prevented from cribbing, we measured cortisol in the blood of cribbing horses fitted with nutcracker and Miracle collars or with a muzzle. Cortisol did not increase while the devices were worn nor was there rebound cribbing when the devices were removed.

Carissa Wickens – *Stereotypic Behaviors in Horses: Implications for Training, Management, Research and Education*

It is estimated 20-30% of horses perform stereotypic behavior (STB). STBs such as crib-biting and weaving are often viewed within the equine industry as negative attributes that reduce monetary value and result in impaired performance. Interestingly, horse owners who have personal experience with STBs are less likely to agree that STBs negatively affect learning and performance although empirical data is needed to support these anecdotal reports. Hausberger et al. (2006) found that compared to non-STB, more STB horses were unsuccessful in learning an instrumental task and took longer to perform the task. Ninomiya (2007) reported that STB horses demonstrated accelerated and stronger (more reinforced) learning compared to their non-STB counterparts. Roberts et al. (2015) showed that compared to locomotor STB, horses that performed oral STB learned tasks more quickly and took longer to reach extinction. Findings from these studies are not always in agreement and it remains unclear whether horses that display STB experience deficits in learning or possess enhanced learning ability. Perhaps STB horses are better at certain types of learning or respond more favorably to reward based training approaches. Another commonly held belief within the equine community despite a lack of substantiation, is that horses learn to perform STBs through observation (i.e. STBs are contagious). Thus, horses with STB may be prohibited from entering boarding and training facilities or are isolated from other horses and/or physically prevented from engaging in the behavior. These viewpoints concerning STBs highlight the need for an improved understanding of STBs within our industry. Specifically, further research evaluating the influence of STBs on learning behavior and performance and investigating the role of social facilitation in the development of STBs is warranted. Development of collaborative research projects and educational initiatives focused on altering industry perceptions of STBs towards positive outcomes for horses will be discussed.

3:00 Break

3:15 **Marion Desmarchelier:** *Progressive Equine Behavior in a Veterinary Medicine School*

Veterinary students are filled with energy and motivated to improve the quality of life of all teaching and research animals as well as of hospitalized patients. Providing the students with the appropriate tools to better understand equine behavior and then develop a new approach to problem solving proved very useful. Based on their learning experience in a volunteer program to practice positive training with our teaching mares, the students obtained significant changes to the curriculum, now requiring every veterinary student to receive the instruction and skills to positively approach a horse. Working as a team with the animal care and management, students overcame technical difficulties to allow for more natural behaviors in our mares. When employed as summer assistants in the hospital, students additionally used their behavior knowledge to help treat difficult equid patients. The success they encountered gathered a strong interest in the

hospital staff, and consequently, more people have started adopting a more positive approach. Using protective contact training as routinely practiced in zoos has also helped train several horses to participate actively in their own medical care. With a pedagogic, constructive and problem-solving oriented approach, our school has been able to raise a strong and ongoing interest toward equine behavior from animal care to faculty. Specific examples of the techniques used will be illustrated and discussed.

3:45 **Petra Collyer:** *Physical Examination of the Equine Behavioral Patient*

Does the horse have a “bad attitude”, has it learned an undesirable coping mechanism, is its performance attributable to physical dysfunction, or is its behavior a combination of these factors?

Many horses being treated for behavior problems would benefit from regular assessments by a veterinarian both before beginning treatment and periodically during thereafter. Often information from and cooperative work with a veterinarian is essential for the successful treatment for behavior problems.

A systematic veterinary medical examination is essential for a complete assessment of equine health. Medical evaluation of a equine patient begins with a case history, observation of the horse, followed by the general and then focused physical examination. The general examination can often be performed quickly and provides an overview of the function of organs and body systems. A focused examination inspects a body system and specific organs more in detail. This presentation will discuss behavior problems in horses associated with specific physiological systems. Main aspects of focused physical examinations and physiological findings of the integumentary system, the nervous system and the musculoskeletal system will be demonstrated.

Physiological findings and clinical signs of dysfunction of the gastrointestinal, reproductive and urinary systems and their relationships to behavioral problems will be discussed/demonstrated/presented?

If the behavior professional suspects a horse has a physical problem, it is advisable that the health status of the horse be evaluated by a veterinarian prior to behavioral assessment and periodically throughout the course of behavioral therapy. Discomfort, dysfunction, and pain will thwart even well designed behavior programs.

4:15 **Katie Bartlett:** *An Integrated Approach to Bodywork: A Look at Why, When, and How to Add Positive Reinforcement to Bodywork Sessions to Facilitate Awareness and Relaxation*

Behavior and performance problems in horses often have both physical and emotional components, and it’s important to address both during training or rehabilitation. The first step in evaluating and treating physical issues is to consult your veterinarian, but many horses also benefit from some type of bodywork. Bodywork is a general term that refers to techniques that involve touch or physical manipulation of the horse with the intention of improving function through a release of tension, better skeletal alignment, or improved circulation. This includes massage, myofascial release, chiropractic and osteopathic adjustments, acupuncture/acupressure, energy work and related modalities.

When I first started doing bodywork on horses, most of my instructors did not recommend the use of food reinforcers because they thought they were an unnecessary distraction and did not

encourage relaxation. But, as a clicker trainer, I found it was natural to use positive reinforcement and I started incorporating it into my bodywork sessions. My experience has been that, with many horses, it improves the quality of the session because the horses are more willing to accept and work with me. This is particularly important for techniques that involve direction manipulation. I also regularly reinforce simple behaviors like targeting, head down, and a relaxed stand, because they encourage relaxation and general cooperation.

In my presentation, I will be sharing how to effectively use positive reinforcement when doing bodywork on horses. This will include answers to some common questions about when it is appropriate to add in positive reinforcement, what kind of reinforcement to use, what behaviors to click, and how to balance relaxation with engagement. As a Masterson Method Certified Practitioner, my focus will be on combining positive reinforcement with the techniques that are specific to that modality, but the same strategies will work for other modalities as well.

4:45 **Cindy Martin:** *Case Study: Positive Reinforcement as an Alternative to Medication and Equipment during Soft Tissue Injury Rehab*

I will present a summary of the process used to rehabilitate a large horse who suffered a career-ending injury. His hand walking schedule, after four months of stall rest, was critical to successful rehabilitation to pasture soundness. Rather than using stud chains or medication (aqua therapy was not an option), we used positive reinforcement to maintain focus and emotional balance during hand walking.

Sunday Morning Sessions February 25, 2018

Hazeltine Ballroom

Time Speaker, Title, & Summary

8:00 **Shawna Karrasch:** *Teaching Impulse Control: Exercises That Can Help the Horse to Develop Impulse Control*

One of the challenges that many horse owners face is a horse with too much energy and enthusiasm. Introducing positive reinforcement may compound this problem if some measures are not put into place to help the horse choose to settle and relax. In order for this to be effective, it needs to be a decision made by the horse. This is something that we can shape and train in small steps starting as early as the bridge conditioning process. Since I started my horse career with professional competitors, I have always appreciated the horse with a lot of energy. However, I also appreciate a horse who is able to be emotionally composed on either side of their performance. I want the horse to be able to choose to perform or play with enthusiasm. However, I also want the horse, when asked, to be able to truly settle back down. Not just be still but to be relaxed and quiet following or in the midst of high energy interactions. I have found that by utilizing positive reinforcement, I can build a strong reinforcement history with the horse's choice to quiet themselves in response to a discriminative stimuli. My objective is to have relaxation be an integral part of the training process from the first interaction. Once the horse learns to keep their head away from me. I begin shaping that to become less active and reinforce the quieter moments. As they gain clarity, they tend to become more confident and relaxed. I continue to shape this until they are standing quietly next to me for longer periods of time. Slowly I take this to slightly more energetic situations and then ask them to lower their energy, emotionally as well as physically. I heavily reinforce this transition until they understand and find value in taking

themselves back down to a more settled state of mind even when things get a bit too exciting. Soon, this becomes their favorite behavior and the one they choose when they feel unsure. It is a great way to slow down and reset in the middle of a training session. This technique also helps to bring the horse below threshold (whether fear or excitement) and works with horses, young and old alike. I will further discuss techniques and the practical applications.

8:30 **Angelo Telatin:** *Differential Reinforcement: An Effective Technique in Horse Training to Decrease Unwanted Behaviors and Improve Horse Welfare*

Avoidance behaviors are common in horse handling procedures to avoid aversive stimuli such as injections, clipping, fly spray or veterinary procedures, and can be a serious safety concern for horses and their handlers. Horse welfare may be compromised during these instances with handlers resorting to punishment or painful restraint methods to control the horse to finish the task. Common training procedures to reduce avoidance behaviors usually follow the rules of non-associative learning, such as habituation or classical conditioning (e.g., counterconditioning and systematic desensitization). However when a horse perform an avoidance behavior, is often able to put distance between itself and the aversive stimulus. This particular scenario, pressure-behavior-release, is a negative reinforcement sequence that trains an organized operant response toward that stimulus. Subsequent increase of intensity of the unwanted behavior does not implicate an increase in fear, only a better organization of the operant response. Differential reinforcement is an effective training technique to use in this scenario, since it is based on the same type of learning sequence,

Differential reinforcement aims to eliminate unwanted behaviors by using reinforcements in an organized way that increases alternative or incompatible positive behaviors and decreases the unwanted ones without the use of punishment. Instead of punishments, differential reinforcement uses extinction: the removal of the reinforcer that maintains the undesired behavior.

The ability to control aversive stimuli by using an alternative incompatible behavior has proven to reduce anxiety in animals and stress is reduced even if the stimulus is applied.

The ability of the horse to control the fearful stimulus, and at the same time the successful application of it, after some repetition, has proven to habituate the animal to the aversive stimulus

9:00 **Terry Golson, Marla Foreman, & Callie King.** Roundtable Panel: *Fear and Anxiety*

Terry Golson – Training for Calm

Much of R+ training is based on the use of food rewards. However, many horses have food anxiety and behavioral issues triggered by feeding. Some equines have histories of food deprivation, some have learned to resource guard, and others have inadvertently been trained to be food aggressive. Many horses go through long stretches daily without food, and so have ulcers/etc. Owners often lack observational and timing skills in order to feed safely. In boarding barns, horses are handled by numerous people, and barns have rules about hand-feeding. I've had many cases in which introducing high-value food rewards compounded issues. In my talk, I'll discuss more of the complexities of these cases, and how I resolved them, so that training could proceed safely and with relaxed horses and owners.

Marla Foreman – *Managing Stress in Horses Moved to a New Place*

When horses are moved to a new place or, worse yet, are sold and have to get to know a new person and a new place, we expect them to settle in and behave like they did before in a short time. We underestimate how long it can take horses to truly feel comfortable in a new situation, find new friends, acclimate to new routines, feeds, climate, sounds, etc. For many horses, it can take 6 months or more for them to feel completely comfortable even in a really horse friendly place. Even though they may seem to be settling in fairly well, the underlying stress can cause slower learning or behavioral changes. Some of the things we can pay attention to and do to help them settle in more easily can include spending more time to support them after they arrive, assess their feed and feeding routines, pay attention to if they get along with their new neighbors or pasture companions, are they comfortable enough to sleep, etc. We need to understand and adjust to the challenges the horses meet when getting to know a new barn.

Callie King – *Biofeedback for Riders with Fear*

Fear makes learning difficult. This is true for our horses and for us. Working with and especially riding horses has inherent dangers. Every rider, trainer, and horse person will experience some kind of fear or anxiety at some point. The effect of this feeling will depend on a person's response to and ability to manage their emotion. Obviously when we can remain calm we can think better, we have better timing, and we don't relay signals of stress to our horses. Learning to manage one's emotions can start by simply observing the physical changes that happen with the emotions of fear or anxiety. This is where biofeedback comes in. Biofeedback gives us instant information, and potentially reinforcement, on key physical indicators of our emotional states. By learning to interpret that information, we can shift our emotion and move from anxious to calm.

10:00 Break

10:15 Debbie Busby: *Transacting to Treat: Transactional Analysis in the Client-Professional Relationship*

Background: Clinical behaviour consultations typically involve combinations of one-to-one client-behaviourist consultations, and multi-disciplinary relationships between client, vet and para-professionals such as physiotherapists or farriers. There is frequently a requirement within the treatment plan for the client to make changes to their management or training, or to the animal's environment or daily activities, in order to maximise the likelihood of effective behaviour modification. This requires a change in human behaviour and challenges beliefs, values and actions which have until that moment, in the client's perception, been successful in achieving their aims.

Learning Points: A collaborative approach puts the caregiver/client at the heart of owning the resolution, whilst simultaneously optimising the influence of professional and specialist service providers. Transactional Analysis (TA) is a model of psychological interaction that understands communication between individuals and groups as fluid life positions that reflect the perceived worth of self and others, and transactions between internal ego states described as parent, adult or child. Adult to adult transactions are based on objective appraisals of reality and are the aim in clinical communications; however, parent and child ego states intervene to evoke crossed

transactions derived from early life decisions experienced as injunctions delivered by parents/guardians, and from behaviours, thoughts and feelings replayed from childhood. Crossed transactions can result in miscommunication or inappropriate emotional responses which are not helpful to the present interactions. Strokes are psychological acts of recognition which maintain emotional wellbeing. Positive reinforcement in the form of strokes strengthens the decision to adopt a life position that facilitates adult-adult transactions and constructive problem solving.

Summary: Therefore an understanding of TA constructs and their application is useful in removing interpersonal barriers and increasing opportunities to effect change in the behaviour of human and nonhuman actors in the treatment paradigm, consequently contributing to a collaboratively successful behaviour modification outcome.

10:45 **Sue Bennett & Trish Loehr:** *Training Dog Trainers*

Cross species training is a popular and important way for professionals to enhance and build on their training skills. As equine trainers and behaviorists, we need to be prepared to offer teaching opportunities to those who train other species. This session will touch on similarities and differences in reading body language, handling, and trainer skill requirements. Similarities/differences include types and value of treats used, training cadence, equipment handling skills and training approach. Having trainers role play as the "horse" learner, and including experienced equine partners for initial learning sessions can be effective bridges between species.

11:15 **Lyndsey Lewis:** *You can Lead a Horse to Water, and You CAN Make Them Drink!*

When we keep horses in captivity, we have a responsibility to train them at least in certain basic behaviors like leading, foot care, standing for the vet etc., but there are other behaviors that are not only practical, but insurance against unforeseen circumstances. Putting drinking on cue is one of those. So much of what we do with captive horses puts them at risk for dehydration – cold and hot weather, access to fresh water, trailering, and performance of every sort both in the competition itself and all the stress surrounding the traveling and the new locations with different tasting water. However, teaching our horse to drink on cue is an easy behavior to teach and in my talk, I will detail two approaches – both using positive reinforcement. The first approach is setting up the environment, so we can capture the drinking and the second approach is simply shaping. This is actually a good exercise even for those new to clicker training because of its simplicity but also because this can be taught to horses still being worked behind protective contact. I'll talk about the pros and cons, how we can set up the environment for success without ever depriving horses of water, and a guideline for changing criterion in a shaping plan.

11:45 **Sharon Madere:** *Confessions? Controversy? Common Sense? When, Why & How I Work Beyond Positive Reinforcement*

About 20 years ago, following the lead of marine mammal and dog training, clicker training had its emergence in the general horse owning public. The past 10 years have seen a growth in positive reinforcement application and research by professionals. Increasing awareness of behavioral science, equine welfare and LIMA principles has brought a welcomed "positive reinforcement" movement among equestrians. This has also led to opinions in some circles that

positive reinforcement is the only legitimate, ethical and humane method that should be used for training or resolving behavior issues.

I will discuss circumstances and specific cases in which I believe that other options (usually in conjunction with positive reinforcement) are preferable from a combined perspective of overall welfare, efficacy, efficiency and safety. With each horse in these examples, I first built a solid history of positive reinforcement for one or more behaviors, with hundreds or even thousands of individual reinforcements. I also monitored the value of the relationship from the horse's perspective, based on the horse's eagerness to approach and interact with me.

Examples include:

- 1) Combining negative and positive reinforcement to teach hoof handling. (I find this to be more efficient than either option alone.)
- 2) Response prevention, desensitization, negative reinforcement, positive reinforcement (and possibly modified flooding) with a horse fearful of being sprayed with water from a hose. (In this case, progress with positive reinforcement alone was very slow; extreme Florida heat and overall efficiency necessitated a quicker solution to a welfare issue.)
- 3) Establishing a verbal conditioned punisher to produce & maintain distance between a group of horses and a person in a pasture. (Highly effective, increases safety for humans, easily generalizes for multiple people.)

Time permitting, I can discuss examples of negative punishment to reduce ear pinning, and combining negative and positive reinforcement to generalize movement of specific body parts.

Sunday Afternoon Sessions February 25, 2018

Hazeltine Ballroom

Time Speaker, Title, & Summary

1:00 **Jen Digate:** *Appetitive Strategies for Taming Wild Horses*

Wild horses have traditionally been "tamed" through a combination of space restriction (small corrals or pens, less space to flee) and the application of mild to severe aversives (advance and retreat, round penning, roping, "throwing" a horse or laying them down.) But the behaviors that form the suite of tameness: approach a human, follow a human, allow your body to be handled, accept equipment and leading with a halter and rope, are behaviors that are organically related to familiarity and social affiliation. Achieving these goals through coercion often produces tense facsimiles of the desired behaviors, absent of real relaxation. Many trainers are not aware that these same behaviors are easily acquired through passive and appetitive strategies of habituation, classical conditioning and positive reinforcement. Additionally, aversive strategies that focus on humans achieving control of the horse's body before they would have offered the behavior themselves, often produce dangerous conflict or "counter control" behaviors like: crashing into round pen panels, bucking, bolting, rearing, striking, flipping over. Putting a mustang into "survival mode" inadvertently during training has contributed to a cultural bias against mustangs as unpredictable or unsafe, and can carry a high physical cost for horse and human. This talk looks at skillful, applied use of habituation, classical conditioning and positive reinforcement in taming wild horses.

1:30 **Sarah Low:** *Trapping Feral Horses in Hawaii and Beyond: Finding Solutions for Humane Wild Horse Handling.*

Join me as I share my experiences gathering, handling and managing a population of approximately 200 free-roaming feral horses on a 23,000 acre defunct cattle ranch on the Big Island of Hawaii. I will share with you how I used field observations, rudimentary knowledge of learning theory and a basic understanding of equine behavior as building blocks for the development of methods to trap, gentle and manage feral horses. I present alternatives to helicopter gathers and the use of elaborate infrastructure to capture, handle, transport and manage feral horses based on my personal experience. I will conclude with a brief exploration of using low stress stockmanship techniques borrowed from the livestock industry and zoos along with outcomes based animal handling welfare assessments to evaluate and improve the welfare of captive feral or wild horses during potentially high stress handling events.

2:00 **Jody Ambrose & Megan Phillips:** *Don't Shoot the Zebra: The Benefits of Collaboration and Diverse Perspectives in Solving Behavior Puzzles*

Those of us who approach horse training from an evidence-based, progressive perspective know what it's like to feel alone in a world steeped (often stubbornly so) in centuries of tradition. We also know the value of finding likeminded, ""kindred spirits"" and sharing our training ideas and philosophies. Collaboration with other equine experts, and with experts in various fields outside the horse world, is one of the most powerful tools we have in the quest to solve complex behavior problems. Yet there are many potentially significant obstacles to working productively with others. Professional networking, effective communication, credit-sharing and resolution of conflict are some of the many difficult aspects we need to discuss and understand in order to maximize the cultural influence of our fast growing community.

Train with Trust® Behavior Consultants is a partnership between myself, Jody Ambrose, and my fellow animal professional and lifelong friend, Megan Phillips. Together we share a passion for animal welfare and education. We enjoy working individually, and as a team, to share our knowledge of humane training and best animal management practices.

Through examination of a recent Train with Trust case involving Ziggy, a 20 year old feral Zebra/Pony hybrid with life-threatening veterinary issues, this presentation explores what lessons we can impart from our experiences working together as a team and with others (including vets, farriers, filmmakers, and a non-profit charity) utilizing our diverse training backgrounds, analytical styles and interpersonal skills to solve unique and complex behavior puzzles - at the same time helping to save a very special animal's life.

2:30 **Mary Richards & Jessica Gonzalez:** *The Particular Challenges of Positive Reinforcement Techniques with Rescued Equids*

Working with rescued equines comes with its own set of challenges. In the modern equestrian industry horses are being rescued with a wide array of issues that can make their care and training problematic. We will discuss how we can adapt management strategies, implement environmental and behavioral enrichment, and use positive reinforcement training techniques to best help equines who come with physical limitations or disabilities, as well as psychological trauma. Given that many rescued equines come with emergency level health problems we'll also discuss how to utilize the Humane Hierarchy to help us make ethical decisions on how to best

prepare the horse for their immediate healthcare needs. Additionally, we will examine some of the emotional and psychological damage that often affects rescued horses, the frequent causes and effects of this damage, and possible treatment plans for these individuals. With all of the above we'll focus on how we can use positive reinforcement training techniques to empower our horses and help them overcome these emotional and physical limitations.

3:00 **Tara Gifford:** *A Little Bit of Country? Radio Choice for Equine Enrichment*

Allowing animals choice in their environment is a prime component of animal welfare. Horses in human care commonly have few choices regarding their environment. What if the horses could choose to have the radio on or off? If a horse has been trained using operant conditioning to turn on a radio set to a country music station, how much time will he choose to have it on? In part A, seven horses were trained to push a panel which would turn on/off a local country music radio station. Each horse was video taped for 72 hours when the push panel activated the radio and 72 hours where the push panel resulted in no radio volume. 6 of the 7 horses had the radio playing for 43-64% of the time. In part B of the study, 2 horses had the choice to activate the push panel to hear a classical music. The horse that listened to country music for 58% of the time, listened to the classical music for 14% of the time. The second horse who did not turn the country music on at all, listened to the classical music for 61% of the time. This preliminary study indicates that these horses may have individual preferences regarding how much and when they choose to listen to music. The concept of teaching an animal to activate a radio, light, fan, water mister, etc., could have many applications to improve animal welfare by increasing their control over the environment.

3:15 Break

3:30 **Ellen Rankins:** *Testing for Success? Equine Temperament as a Predictor of Success in Equine Assisted Activities and Therapies*

It has been hypothesized that temperament plays a key role in a horse's suitability and ultimate success in any given discipline or activity. This is of particular interest and importance in the field of equine assisted activities and therapies because of the industry's needs to minimize time and monetary inputs associated with horse evaluation, to maximize the safety of the vulnerable populations served, and to protect the welfare of the horses engaged in these activities. Temperament is typically considered to be a behavioral characteristic that is consistent over time and across situations. Various work in the field of equine behavior has attempted to define and develop tests that accurately measure various aspects of the horse's temperament using both subjective and objective measures. While equine temperament has received increased attention over the past decade, there has been limited work to specifically investigate the characteristics of horses in therapeutic riding programs and the relationship between temperament and equine performance in these activities. Previous work in this area has included studies by Minero et al. (2006), Anderson et al. (1999), and Foster et al. (personal communication) that have focused primarily on fear or reactivity in therapeutic riding horses and compared this to horses engaged in other activities or sports, rather than using it as a predictor of performance. Given the number of other characteristics that comprise a horse's personality and the lack of understanding regarding what makes a horse well-suited to therapeutic riding further research aimed at

addressing these questions is warranted. Additionally, there is little implementation of standard evaluation procedures for horses entering therapeutic riding or other equine assisted activities and therapies (EAAT). Recognition of these gaps within the field highlights the need for development of temperament assessments that are practical and easy to implement for EAAT personnel.

3:45 **Robin Foster & Nina Ekholm Fry:** *A Standardized "Basic Behaviors" Test for Horses*

In this talk, I will summarize the "Basic Behaviors" test and present preliminary results from field testing. It was developed by Watershed Right Horse Initiative in collaboration with independent equine experts, and field testing was carried out by five leading equine rescue organizations in the United States. The Basic Behaviors test is a practical tool for evaluating a horse's responses to a set of 15 routine situations, such as leading, hoof handling, being sprayed, and trailer loading. A standardized behavior instrument has the potential to increase adoption success and improve communication and transfer of horses across groups within the industry. A horse's performance on individual assessment items could also be used to identify areas in which additional training is needed. The tool has broad application across disciplines and geographical regions, and the language and situations included in this test were chosen for their universal familiarity and value to anyone working with horses. At this time, longitudinal studies are being considered to discover if scores on the Basic Behaviors test are related to a horse's trainability and temperament or predict its future success in a particular riding discipline.

4:00 **Nina Ekholm Fry:** *This is My Paradise, But I Don't Think It's Theirs: Challenges Facing Horses in Equine-Assisted Activities and Therapies*

The fields of equine-assisted activities and therapies, the inclusion of horses as part of human health and learning services, represent a growing segment of the horse industry. In the U.S. alone, there are 38 higher education institutions offering coursework in these areas, and dozens of organizations teach models of how to facilitate this work. The new role of horses in human health services is thought to represent a shift in human-horse interaction and in our overall relationship with horses, but the same issues related to understanding their cognition, as well as feeding, social, and locomotory behaviors and needs, remain. Anthropocentric views such as "horses are meant to heal trauma", and "horses volunteer every day to help humans", create an intriguing situation: in this field, horses are often seen as becoming psychologically fulfilled and receiving mutual benefit from participating in the therapeutic work humans create. However, the requirements for understanding horse behavior and science-based training methods have been low to non-existent in programs preparing individuals to provide these services. It is sometimes believed, especially in services focused on mental and emotional growth, that the horse should receive no training or preparation for the situations they might face in a session, as this could diminish their immediate psychotherapeutic value. In this presentation I will provide an overview of the field of equine-assisted activities and therapies, including clear definitions and professional roles; discuss barriers to knowledge of equine behavior and training in these fields; and present opportunities for improving welfare for horses working in therapy and learning services.

4:30 **Katrina Merkes:** *Horse-Human Partnership: How Far Have We Travelled Together*

Since the taming of the first horse, our relationship with these noble animals has improved our human lives in many dimensions. Firstly the horse enabled us to expand our own borders through transportation, war, and work. More recently the horse enables us to expand our own minds through partnership in sport and equine-assisted therapy. Successful trainers throughout the ages have understood the horse and interacted in tacit ways that might seem mystical to an outsider. As our relationship with the horse deepens, some of these ways of interacting with the horse have been discarded while others persist and become engrained as “this is just how it is done”. Now with the advent of equitation science as a science in its own right, we can begin to gather empirical evidence to support or refute various techniques for interacting with horses. This is particularly important in light of human safety and equine welfare – not only providing good welfare, but providing a “life worth living”. Empirical evidence can support good training practices or influence us to change the way we have always done things. Research in this lab has focused on behavioural and physiological responses of horses when interacting with humans in various situations, and the use of external apparatus (ie. whips, spurs, martingales, etc.) in training. Specifically, horses appear not to distinguish between humans who have PTSD and those who do not, but do respond differently to people who have more experience with horses. The use of a whip does not appear to make a horse run faster, so we need to question the use of this tool. This presentation will share our research results and suggest ways of working with the horse in an educated manner for improved welfare and better outcomes for both horse and human partner.

5:00 **Justine Harrison:** *To Be Continued...*

A forum of progressive equine professionals is invaluable to share ideas, knowledge and information amongst ourselves, but perhaps what is more important is what we do with this information. How can we communicate better equine science, welfare, behaviour and training messages to the equestrian community and to the general public?

What do we do next? How do we continue this good work?

Persuading horse owners and the equestrian industry that they need to change some of their abusive or unethical practices is a tough challenge, even for the most admired and experienced experts.

It is important to consider our target audiences, the various communication methods at our disposal, the promotional messages that we can use and whether all of this is best done by individual professionals, a co-ordinated industry effort, or both.

Measuring the effectiveness of results is key to success. It can be demonstrated that successful communication campaigns do not only reach a large measurable number of people, but can directly influence the behaviour of horse owners.

Effective communication solutions will not just benefit equines but also their owners, the professionals who work with them, all of our work as well as the wider equine industry.