

Program Abstracts



PROGRESSIVE EQUINE BEHAVIOR & TRAINING FORUM

February 2019 Orlando, FL

Saturday Morning Sessions February 23, 2019

Time Speaker & Title

8:30 **Sharon Madere:** *Time Constraints in Behavior Consulting and Pushing Emotional Thresholds*

Time constraints in equine behavior consulting can occur for a variety of reasons. In a perfect world, we'd have all the time needed to implement behavior modification training plans without over-pushing emotional thresholds. But with real-life limitations we may be faced with modifying/accelerating our protocol to fit the time allowed, or declining the case altogether. There are undoubtedly risks involved with pushing "thresholds," and we may face a delicate balancing act between those risks (including making the behavior worse), vs. the potential reward of resolution. Also, the term "threshold" can mean different things to different people - which threshold? I will discuss a recent behavior case (severe head & ear-shyness, difficulty haltering, bridling, etc.) in which I discounted my fees, accelerated the protocol (using positive reinforcement, negative reinforcement, desensitization and counter conditioning) into a compressed time frame, and worked around challenges in daily management. I will show video clips of the process, including risky moments of emotional reactivity as measured by different thresholds, and the final outcome.

9:00 **Tammy McCormick Donaldson, PhD, CAAB:** *A Horse with Fear of Other Horses Approaching Successfully Treated Utilizing a Positive Reinforcement Based Protocol: A Case Study*

Arousal and fear resulting in escape behavior in horses is not only dangerous to the handler but can be very detrimental to the horse. I will present the case of an eight-year-old gelding with a history of trauma from being run down by another horse. This event resulted in prolonged fear and escape behavior in response to other horses approaching either while the horse was in his stall or in the arena. The unwanted fear-based behaviors included mouthing (nudging with mouth and biting the handler's hands and clothing) increased arousal and attempts to escape. The horse became injured in his stall when a horse approached him moving through the aisle. The resulting soft tissue injury required stall rest and hand walking. It was imperative to address the underlying fear related behaviors in order to prevent further injury and promote healing. Positive reinforcement training can be used to reduce frustration and as the framework for treating behavior issues that impact rehabilitation. A protocol of positive reinforcement based training (clicker training) of stationary behaviors and head lowering in addition to a program of progressive desensitization and counterconditioning were instituted to address the fear based unwanted behaviors (mouthing, arousal and escape). After two weeks, the protocol significantly decreased mouthing and escape behavior the stall. After one month the protocol resulted in decreased arousal and escape behavior while hand walking the horse with other horses approaching in the arena. At eight weeks the horse was approved for light riding; using the same protocol with generalization of a cue to use while under saddle, the horse could be ridden calmly in the arena with other horses present.

9:20 **Marla Foreman:** *Effect of Combining Pressure-and-Release with Clicker Training*

Trainers who strive to use positive reinforcement (R+) believe that to be the path to optimal outcomes, both in performance and in animal welfare. However, the majority of equestrians rely on negative reinforcement (R-) and positive punishment (P+). When horse owners consider switching to R+, they often start by adding clicker training (marking the goal behavior and delivering food) to their familiar, traditional horse-training protocols. Our experiment evaluated the effect of combining R- (lead-rope pressure and release) with R+

(click-and-treating the goal behavior), as compared to using R+ alone to shape (reinforce progressive approximations of the goal behavior) the same behavior. The goal behavior was to walk onto a rubber stall mat ahead of the trainer, placing the front feet inside a square marked in contrasting tape. Four horses, aged between 3 and 19 years, were trained to step into a yellow square (R+ only) and a blue square (R- plus R+). All horses had a history of R- and P+, but currently their handling and training relies predominantly on R+. All training sessions were video recorded. Once the horses met the final criterion in 80% of the trials in a session, recordings of their trained behavior were evaluated by 13 expert horse trainers blinded to the goal of the experiment. The outcomes of the two training approaches were compared using the total number of trials needed to meet the goal and the evaluators' subjective numerical scores of each horse's emotional state. The results show no systematic difference between the two types of training, in either the number of trials or the emotional-state score. This suggests that a mix of R+ and R-, which is common in clicker-training beginners and also not completely avoidable for R+ purists, can be a part of effective and humane horse training.

10:05 **Nina Ekholm Fry:** *"Ethical" Use of Negative Reinforcement? Asking the Question through a Social Justice Lens*

Negative reinforcement, the application and subsequent removal of an aversive stimulus, typically pressure, where the behavior immediately preceding the release of pressure is reinforced, is the most commonly applied approach to horse training. In any kind of equitation, for competition or leisure, where horses are subject to equipment directly attached to them, negative reinforcement forms the basis for the horse's consistent compliance with the human-directed activities performed. However, inherent in the use of pressure is physical and psychological risk to the horse and their welfare, which has led to advocacy for increased use of positive reinforcement in human-horse interactions. In some settings, training that involves use of negative reinforcement is now considered undesirable or even unethical. Since horses who interact directly with humans in a domestic equine environment benefit from understanding how to yield to pressure when handled, and the spread of combined (blended) reinforcement into the traditional equestrian world is needed, ways to operationalize the application of negative reinforcement in horse training with the dual purpose of creating a common starting point of discussion and to describe its use in practice in a more specific, and more ethical way are discussed. Further, through use of a social justice lens involving perspectives of power, privilege and control in human-horse interactions, we can more easily examine what we consider ethical and unethical in horse training.

10:35 **Orla Doherty, Camie Heleski, Katrina Merckies, Carissa Wickens:** Roundtable Discussion—*Taking the "Bad" out of "Negative". How Positive and Negative Reinforcement Influence Training and Learning.*

To ensure survival, it is necessary for animals to tailor behavioral responses to changes in their environment. They can achieve this through a variety of non-associative and associative learning. One aspect of associative learning - operant conditioning - allows the animal to engage in a voluntary activity for a reward or avoidance of an aversive outcome. For learning to occur, there must be contingency (i.e. a link between the behavior and the outcome) and contiguity (i.e. the behavior and the outcome are linked closely in time). Horses have been traditionally trained using negative reinforcement (NR) (e.g. the rider removes leg pressure when the horse moves forward). By its very definition, NR implies the use of an aversive, no matter how small. There has been a recent movement to train horses using positive reinforcement (PR) with the belief that it is more humane for the animal. Traditions are often resistant to change in the horse world, leading to divisions among equestrian enthusiasts regarding the training methods that are in the horse's best interest. Unfortunately these differences in opinion may hamper forward progress and overall change for improved horse welfare. Much confusion surrounds both the terminology and the application of PR and NR, with NR construed as bad, or incorrectly labeled as punishment. This roundtable discussion will focus on the correct interpretation of operant conditioning as it applies to horse training, explore the usefulness of PR and NR as well as punishment for behaviour change and will open for discussion the possible divisions and how these might be reduced. A clear understanding of learning theory allows greater understanding of training methods and selection of methods to optimize outcomes and thereby horse welfare.

1:10 **Robin Foster, Sue Bennett:** *Click & Drop: A Study of Penile Tumescence During Equine Clicker Training*

The use of positive reinforcement as a horse training method has increased over the past decade, as have reports of penile tumescence (dropping or erection) in geldings and stallions during training. I conducted a pilot study to explore how the experiences of trainers align with factors known to elicit erection in male mammals. Examples include: sexually arousing stimuli such as a mare in season; non-sexual social stimuli such as physical contact and proximity of “trusted” others; non-social stimuli such as food and stressors; and classically conditioned stimuli. From May-October 2017 we distributed an online questionnaire. Respondents reported basic demographic information and answered six open-ended questions describing situations in which their horse drops and details about the training process. A convenience sample of 103 horse owners completed the questionnaire providing information about 120 horses—99 geldings, 6 stallions, and 15 male horses of unspecified castration status. Horses ranged in age from 1.5 y to 30 y (Median=13 y) and represented various breeds, although most were thoroughbreds (n=15), quarter horses (n=11), or other saddle types (n=51). Of the 120 horses, 53 always dropped during clicker training, 43 sometimes dropped, and 24 never dropped. Factors associated with dropping included trainer and horse experience and type of food used as a reinforcer. Dropping was less likely when the trainer was more experienced in general, and when the horse had more experience with clicker training. Dropping was also less likely when a hay replacement reinforcer was used, and more likely when apple and treat reinforcers were used. Nearly all horses dropped in other situations, especially when relaxed. Interestingly, horses who dropped when groomed were also most likely to also drop during clicker training, suggesting common key factors between the contexts of grooming and clicker training. The implications of these and other findings will be discussed.

1:40 **Antonia Henderson:** *Why Good People Do Bad Things to Horses: A Psychological Perspective*

What is it that makes ethical and compassionate human beings perform unconscionable acts of harm toward horses? With competition schedules and management practices that leave horses to endure life sentences of solitary confinement, diets that thwart their ethological need to forage, and sport that pushes for ever escalating physical and psychological demands, horses suffer. I will explore the psychological principles that may explain how good people do bad things to horses, including Anthropomorphism, The Fundamental Attribution Error, and Moral Disengagement. Anthropomorphism refers to ascribing human thoughts, feelings, and motivations to animals. When we credit horses with the same cognitive mechanisms that drive us to succeed, we also hold them accountable when they fail. Underlying these accusations is the assumption that the horse understands what we want, that he also desires it, and that when he fails to deliver it, that he is deserving of the punitive consequences. The Fundamental Attribution Error posits that when trying to explain another’s actions, we tend to underestimate situational variables, and overestimate personality or dispositional factors. Although originally proposed to explain human attribution processes, the theory also applies to how we explain horse behaviour. We are quick to judge a horse as stubborn or malevolent, and slow to consider the environmental elements that may underlie the undesirable behaviour. Moral Disengagement involves sophisticated cognitive restructuring strategies such as distortion, minimization, and sanitization of inhumane treatment. This allows us to not only distance ourselves from our horse’s suffering, but invest our harmful behaviour with a higher principled purpose that serves to validate immoral behaviour. Through these and other psychological mechanisms we engage in a gradual severance of self-censure that leaves us able to tolerate increasingly uncomfortable acts of harm, often without awareness that our ethical line in the sand has shifted.

2:10 **Terry Golson:** *In Case of Emergency (ICE) for Horse Professionals*

Everyone at this conference works with horses. What we do is inherently dangerous. It's not a question of if, but when, something happens that you'll have to call a first responder. Do you know the best way to get help? Do you have the necessary information so that the first responders can do their job? I've been thinking about this for a reason. Recently there was an accident that resulted in a death at my boarding barn. All of the people at this stable are skilled equestrians, and the facility is professionally run, and yet my friend Lucy was airlifted out without emergency contact or next of kin information. This tragedy prompted me to look into the best protocols of ICE for horse people. We have unique scenarios - the location (such as an inaccessible trail, or a muddy barnyard), the often solo nature of interactions with our equines, and the fact that there might be a thousand pound animal running around loose near the injured person - complicates what happens next. I've interviewed first responders familiar with such scenarios and I will share what they've learned. I'll cover what to carry on you, on your saddle, and in the barn. Of course, preventing such accidents would be the best strategy. Because many of us are called in to work with horses that others deem too dangerous to handle, I'll go over how to think through the risk to yourself and others, and how to make decisions to keep everyone as safe as possible.

3:00 **Callie King:** *Using Timeless Marketing Principles to Spread the Message of Progressive Training*

Marketing is all around us. It affects many of our day to day decisions, even though much of that decision making is unconscious. Marketing affects more than just our purchases, it also affects our behavior and our patterns of thought. Unfortunately, the term "marketing" carries negative connotations and stigma for many people who view it as a business tactic to be misleading or manipulative. While marketing certainly has been used unscrupulously, it also can be a powerful tool to spread a positive message. In this talk, I will discuss: Why marketing changes human behavior, and how our marketing can persuade horse owners, riders, and trainers to adopt more progressive training methods; How education based marketing builds a relationship with the customer; Why story works so well to keep people's attention in the marketing message.

3:30 **Amanda Jay, Bruce Patti, Mary Richards, Melanie Watson:** Roundtable *Mind the Gap: Getting Real About Taking Positive Reinforcement Training Techniques into the Mainstream Equestrian World*

World-wide, the mainstream equestrian community overwhelmingly uses training and handling systems based in millennia of effective application of negative reinforcement and positive punishment to achieve desired equine behavior. Aversive equipment, and taboos such as no hand-feeding, have ancient and legitimate rationales in practical safety for both equine and handler. The size of this vibrant, existing community dwarfs the current number of equestrians and equine practitioners who understand and use training which elicits behavior without aversives, systematically applying positive reinforcement along with the behavioral training techniques of bridging and shaping (referred to as "R+ training" in this discussion). Those of us committed to R+ training for equine welfare must recognize and respect the depth of experience embodied in traditional horsemanship, at the same time offering equestrians a clear path and motivation to make a major transformation in training practices. As behaviorists, we know that positive punishment, such as shaming or outlawing traditional practices, will only push these practices into the shadows. Using our own principles of shaping behavior with positive reinforcement, how do we reach and motivate traditional equestrians to change on a large scale? Amanda Jay will discuss existing motivations within the traditional equestrian community, along with researched approaches to change based on the book "Switch: How to Change Things When Change Is Hard" by Chip and Dan Heath (2010, Broadway Books). Mary Richards will discuss her life and work experience in the difficulty of bringing change from her zoological background to the equine industry. Melanie Watson will discuss potential change in UK equine educational syllabus content to make learning theory and LIMA available to our future grooms and trainers. Bruce Patti will share his thoughts on effecting change by example, incorporating positive reinforcement in his training of horses, and influencing students in a way of life.

8:30 **Katherine Houpt:** *Patterns of Salt Consumption by Horses*

As herbivores, horses do not have much salt (NaCl) in their diet; therefore, because Na is a required nutrient, they must locate and consume salt. Despite its importance, there is very little information on how often horses consume salt either in the wild or in the pasture or stall. We undertook a project to quantify the frequency with which horses will consume salt. A camera trap was positioned so that a 10 sec video was recorded each time the horse broke the infra beam over the salt block. Salt intake varies both within and across horses. Mares (n=8) on dry lot ate salt less than once a day (0.75 ± 0.15 visits/day). In a small study of 3 foals, the foals licked the salt 97 times and the mares 60. In a third study the frequency of salt consumption varied with the hours the horse was ridden (correlation coefficient equals 0.83; $p < 0.05$), probably indicating that loss of sodium in sweat may trigger a salt hunger.

8:50 **Angie Adkin:** *Diet and Behavior - Can Maternal Nutrition Impact Target Training and Memory in Young Horses?*

Maternal nutrition during pregnancy can influence the fetal genome and may elicit health and behavioral modifications. Exposure to the omega-3 fatty acid, docosahexaenoic acid (DHA), has been shown to influence behavior and cognitive function in neonates and children. Enhancing learning outcomes in horses is a high priority in the equine industry, which has the potential to positively benefit both the human-horse relationship and welfare. To investigate the longitudinal influence of maternal DHA on offspring behavior and cognition, 20 mares were supplemented with either a fat supplement containing an algae source of DHA, or a placebo during their last trimester through 2 months lactation. An ethogram was created to document behaviors of the foals at 1 and 2 months of age. Additionally, positive reinforcement was used to teach 2-month old foals to touch a target object. Memory recall of target training was reevaluated at 6 months, 1 year, and 2 years of age. Furthermore, performance on new tasks were assessed by using positive reinforcement techniques as the foal aged. Researchers were blinded to treatment only when evaluating foals and weanlings. Results indicate that exposure to maternal DHA supplementation positively impacts early social behaviors, but does not necessarily enhance the rate of learning in young foals. As weanlings, exposure to maternal DHA increased performance on some tasks, but did not enhance memory. As yearlings, DHA-exposed horses were more likely to score perfect on a novel tarp crossing and bridling task, and tended to complete the bridle task faster compared to placebo yearlings. Lastly, DHA-exposed yearlings and 2-year olds tended to score better on memory recall compared to placebo-exposed horses. These results demonstrate that young horses respond well and remember positive reinforcement training. Moreover, exposure to DHA during the prenatal period may improve long-term memory recall and enhance learning ability in young horses. More research is needed to confirm and expand these results.

9:20 **Victoria Voith:** *The Little Spinning Horse: Self-mutilation and Co-morbidity of Medical Problems in a Male Horse with Early Separation and Isolation from Conspecifics*

A 4 month old colt was separated from his dam and raised without other horses. At approximately 4 years of age he was sold and transferred to a training facility where the following behaviors were reported: attempts to bite the faces of horses across fences and when in a stall appeared to be trying to bite his flank and penis. Otherwise, he was good natured and easy to train. When he was transferred to another, busier, facility, he was reported as “acting crazy” and returned to the original training facility. He had lost weight and had multiple, self-inflicted wounds on his body. Following castration, he was shipped to California. When placed in a stall he engaged in spinning, squealing, and kicking sides of the stall and rafters. These stall-behaviors decreased overtime, but did not disappear. Outdoors, he would spin, bite at his legs and bite his body, run in large circles with head and neck titled, and vigorously kick laterally and vertically. He never threatened anyone while engaging in such behaviors. Outside of these episodes, he remained good natured. Over several months, numerous behavioral and medical procedures were initiated with little effect on the spinning and self-mutilation. Eventually he was diagnosed and treated for gastric ulcers and sand-colic.

Cribbing never developed and running with the tilted carriage of the head and neck stopped. This case illustrates co-morbidity of self-mutilation/redirected behaviors and medical problems of a male horse that was raised without conspecifics or exposure to novel environments. Retrospectively, it was learned that as a youngster he chased his tail like a dog.

10:05 **Jenny Biehunko, Marion Demarchelier, Sarah Low, Shawna Karrasch, Sue McDonnell, Catie Torcivia:**
Roundtable Discussion--*Positive Training and Handling for Routine Health and Veterinary Care Procedures*

Our objective for this round table session is to collaboratively discuss the use of state-of-the-art positive handling and behavior modification techniques for equine routine health and veterinary care procedures. Five behavior professionals will each briefly present introductory remarks on an aspect within this broad topic. Marion Desmarchelier will describe positive training of hospitalized equine patients at the University of Montreal specific for the horse's aftercare needs, such as using positive reinforcement to encourage drinking in dehydration colic-prone horses, to comfortably allow mildly aversive procedures, or to help with physical therapy in orthopedic cases. Shawna Karrasch will describe her use of positive reinforcement to teach neurologic horses to participate in their physical therapy. Catie Torcivia will present several examples of specific protocols taught at the University of Pennsylvania's New Bolton Center for positive handling of equine patients for health care procedures. Jenny Beard and Sarah Low will address the current atmosphere in veterinary medicine and education regarding use of positive handling and cooperative care. Sarah will provide results of an informal survey of several veterinary schools in North America regarding faculty and curricula in equine behavior and handling. Jenny will be emphasized useful ways to communicate with both equine professionals and the veterinary community about partnering on cooperative care and behavioral consultation with training issues. Following these opening remarks, panel moderator Sue McDonnell will facilitate discussion among the panel and forum participants with a primary objective of identifying potential strategies for increasing health care community use and promotion of positive handling/cooperative care.

Sunday Afternoon Sessions February 24, 2019

Time Speaker & Title

1:10 **Barbara Sherman:** *Studies of Wild Horses Enhance Our Understanding of Equine Behavior*

Although horses (*Equus caballus*) have been domesticated for thousands of years, they retain many of the behavioral features of their wild ancestors. A number of excellent studies of free-ranging "wild" horses in environments ranging from barrier islands and river deltas to high plains reveal remarkable similarities in horses' social organization and behavior. This concordance suggests the adaptive value and heritability of specific traits. Behavioral characteristics of wild horses that have likely contributed to their evolutionary success include sleep patterns, foraging strategies, social interactions with familiar vs. unfamiliar individuals, and detection and avoidance of predators. An awareness of the behavioral characteristics of free-ranging horses may be used to improve equine husbandry, performance, and welfare. Meeting behavioral needs may reduce the incidence of some behavior problems, including escape behavior, aggression, and stereotypies. For example, studies of free ranging horses demonstrate large amounts of time is spent foraging and constant visual and physical contact with group members occurs. A study of confined racehorses in work (McGreevy et al., 1995) demonstrated the strongest associations with stereotypic behaviors occurred when the amount of forage provided was relatively low, when bedding types other than straw (a foraging substrate) were used, and when box designs minimized contact between neighboring horses. The objective of this talk is for equine behaviorists to be aware of heritable equine behaviors and to appreciate that failure to meet behavioral needs may lead to behavior problems, including stereotypies, and impaired welfare.

- 1: 40 **Hannah Davie:** *The importance of reproductive state to the structure and cohesion of family groups and herds of reintroduced takhi (Przewalski's horse: Equus ferus przewalskii) in Mongolia*

Takhi (also known as Przewalski's horse, *Equus ferus przewalskii*) represent hope for the future of wildlife conservation through their return to the wild after near extinction. Although their initial reintroduction to Mongolia has been successful, the three established, free-living populations remain at risk from isolation, resource competition with livestock and humans, and hybridization with modern domestic horses. Family groups (one stallion, a few mares, and offspring) that stay close together and form herds with other family groups are less apt to be isolated from other takhi and to hybridize with domestic horses. Larger, more cohesive herds are also easier to manage to minimize competition for water and forage with humans and livestock. The aim of our research was to determine which individuals in takhi family groups formed the most social connections, negative and positive, with members of their own family or with members of other families. We found a significant difference in social activity relative to age and sex. Within family groups, adults, mostly mares, maintained personal space by displacing other individuals, primarily juveniles. Juveniles, mostly colts, were most involved in within-family play and social grooming. Family stallions maintained the borders between families within the herd, and only stallions and colts engaged in between-family play and grooming. Our results suggest that early social experience in juveniles and later social tolerance in stallions influences the cohesiveness of family group herds, but within-family social structure is shaped by the social tolerance of mares.

- 2:10 **Colleen Brady, Elise Lofgren:** *The Importance of Equestrian Social Science in Equine Welfare*

As domestic horses do not have agency over their own care and treatment, a vital step in improving welfare for horses is to change human behaviors that compromise that welfare. Our work applies education, communication, and psychology theories and research methods to understand factors influencing human decision making regarding horse welfare. Our research thus far has suggested that riding discipline may be a predictor of how certain welfare practices are viewed and discussed. In several quantitative studies, respondents report fewer welfare concerns within their own disciplines than they do in other disciplines. Use of videos or verbal descriptions of scenarios both had this result. The value of social interaction between horses, related to welfare, differs by discipline; and welfare in Saddle Type, Gymkhana/Gaming and Rodeo disciplines are of highest concern to those in other disciplines. In a recent primarily qualitative study, participants were asked to select the most desirable scenario from a series of pairs. Each scenario pair described the living situation of two horses, with a focus in each of the 5 Domains. This positive psychology approach revealed that turn out time, and the ability to be 'just horse' were of major importance to people, but did not supersede concerns if they believed a particular discipline had welfare issues broadly. Our research has suggested that using a positive psychology approach when designing surveys could result in a more robust understanding of factors people prioritize relative to evaluating horse welfare. A better understanding of these factors will assist us in tailoring messaging regarding horse welfare for the different components of the horse owning public.

- 2:55 **Emily Weiss:** *ASPCA Equine Welfare Program: learnings from year one, next steps and questions for chewing...*

In 2018 the ASPCA launched the new Equine Welfare Department aimed toward the lofty goal of good welfare for all equines. We launched several pilots designed to help us better understand opportunities for impact. This session will focus on our discoveries from the Help a Horse adoption contest, the Vet Direct Safety Network, the Equine Regional Open Admission Pilot, cruelty work, innovation grants and the like. We will discuss some of valuable learning that have guided our 2019 work and spend time discussing opportunities for collaboration and brainstorming.

3:15 **Jessica Gonzalez:** *Getting Kids Involved in Alternatives to Riding*

At our rescue, Empowered Equines, we focus on spreading education about Positive Reinforcement training. We target the youth community by offering them time to work with our animals after school and on weekends. Our focus has been introducing these young equestrians to a world of kind communication through positive reinforcement. Because so many of our horses are unable to be ridden, for some reason or another, this education often involves teaching them about fun alternatives to riding. This is a passion of mine, as we see so many incredible horses lose their homes or their lives because they're unable to be ridden. With positive reinforcement at our disposal we are able to teach our horses literally anything they're capable of doing, which opens up a lot more opportunities for fun than just riding. Training tricks is one of the kid's favorite things to do, teaching the horses to answer "yes" and "no", bow, smile, give kisses, are all just fun ways to build a relationship on the ground. Tricks are especially fun to work on in the winter when stuck indoors. In the summer, the favorite activity is agility obstacles! This is a great way to keep our horses (and students) fit. This also benefits their proprioception, coordination, communication skills, and fine and gross motor skills. Horses can also participate in some fun sports, soccer, basketball, ring toss, and art like painting and music. Sharing all the fun, unique, and engaging ways to work with horses from the ground, especially to young people, can really brighten the future for horses as a whole. Helping kids have fun as well as keeping horses in homes. In this presentation I'll share all the fun ways we enjoy working with our rescued horses on the ground and how this has engaged so many young, passionate animal lovers.

3:45 **Patricia Barlow Irick, Ginny Chase Elder, Tim McGaffic:** Roundtable Discussion—*Educating and Engaging the Next Generation of Horsemen*

This roundtable is a collaboration among Tim McGaffic, Patricia Barlow-Irick and Ginny Chase Elder, and addresses the influences that will impact the future training and education of the next generation of horsemen. Tim McGaffic will discuss how and where people are learning about horses in general and current attitudes towards training. We will discuss the pitfalls of learning by “google”, tendencies of human nature such as willful ignorance, and the branding and marketing of pseudo-science as the “next” thing. Ginny Chase Elder will bring forum participants up to date on the equine population survey released by the American Horse Counsel in 2018 and define the changing demographics of horse ownership and the characteristics of the next generation. Patricia Barlow-Irick will discuss the need for up to date solutions to influence and educate the next generation to acquire a solid foundation in learning theory. She will detail her creative concept of a largescale plan of action using a certification badge system. The roundtable discussion will connect these three hot topics through active forum attendee participation, ideas and suggestions during the question and answer period.