New Zealand's code of welfare for horses and donkeys was developed by the National Animal Welfare Advisory Committee (NAWAC), under provisions in the Animal Welfare Act 1999, and issued by the Minister for Primary Industries in 2016. This code applies to all horses, ponies, donkeys and hybrids of these in New Zealand. The code contains 15 minimum standards that owners and persons in charge of horses and donkeys in New Zealand must meet including standards relating to equine management, food and water, shelter, housing and facilities, restraint and containment, behavior, handling and training, equipment, breeding, foaling and weaning, identification, health and emergency humane destruction. When developing a code of welfare, NAWAC is required under the Act to take into account good practice and available scientific knowledge, as well as public opinion and any other matters it considers relevant. Minimum standards have legal effect in that failure to meet a minimum standard in a code can be used as evidence to support a prosecution for an offence under the Act. An amendment to the Act was made in 2015 and allows for the development of animal welfare regulations. Regulations around horses and donkeys are currently being developed. These are directly enforceable, are associated with fines and infringements, and are intended to further improve welfare. New Zealand's regulatory system relies heavily on scientific evidence in order to guide appropriate standard setting to ensure that people meet the physical, health and behavioral needs of their animals.

Keywords: horse; donkey; legislation; welfare; code

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A pilot study for the development of the equine behavior assessment and research questionnaire (E-BARQ)

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Numerous factors affect horse learning. In this study, data were obtained from horses (n=96) that were trained to step backwards through a corridor in response to bit pressure and tested for responsiveness with rein tension meters. A week before these tests, the horses' owners were questioned about each horse's management, behavior, training, behaviors indicative of conflict, and factors such as breed, age and sex. Factors from these three broad domains were studied using a multiple logistic regression (MLR) model to examine associations between horses' behavioral attributes and test results. The MLR included estimates of the rider's ability and experience and owner's perceptions of their horse's trainability and temperament. The influence of the various factors on the ability of horses to learn to step backwards, as measured by the relative latency to back through the corridor over the course of trials, were assessed. Preliminary results revealed several significantly correlated variables. They revealed explanatory variables that significantly influenced rate of learning. Horses were faster at backing when handled on the right ($t_{94}=3.65$, $P<0.001$) than the left side. Horses in regular work did not learn significantly more quickly than their unworked counterparts but showed a trend towards completing the task faster. Horses regularly ridden by beginners showed the slowest learning ($F_{6,81}=2.98$, $P<0.05$). These findings will help clarify how horse characteristics, training and management may influence learning and how their application may optimize learning outcomes. Items that assess these qualities will be integrated in anticipated equine behavior assessment and research questionnaires.

Keywords: learning; horse management; training; temperament

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Attitudes toward the application and use of biometric health data in equine training and care

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A survey was designed to identify a relationship between an individual's role in the equine community (owner, trainer, caretaker, casual rider and competitive rider) and their attitude about the use of technology in the collection and application of biometric health data. Survey questions sought to determine whether community members collected health data independently, and a community member's attitude about the use of technology, asking for an indication of if they would use technology to monitor health data or maintain health data records. Respondents (n=74) frequently identified with multiple roles, with some combinations such as competitive riders and owners being common. The results showed that there was a relationship between an individual's role in the equine community and their attitude of health data collection specifically, those identifying as either a competitive rider ($Chi^2=10.334$, d.f.=4, $P<0.05$) or a horse owner ($Chi^2=12.081$, d.f.=4, $P<0.05$). No other demographic groups showed such dependence. The results also showed a relationship between likelihood to collect biometric data for training and care and identifying as a competitive rider ($Chi^2=10.597$, d.f.=3, $P<0.05$). Overall, approximately two-thirds of respondents (50 out of 74, 67.6%) would be likely to use technology for care and training. The availability of accessible technology that allows easy recording of health and performance related information for individual horses will assist with communication between responsible personnel and contribute to the maintenance and improvement of horse welfare.

Keywords: owner attitude; health; record; biomedical; data

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Field test of an instrument to identify youth perceptions of equine welfare issues among common training practices

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Youth account for vast numbers of participants in equine activities and what they learn as youth will impact interactions with horses as adults. The aim of this study was to develop an instrument to gather data to increase understanding of youth perception and awareness of what constitutes a compromise to equine well-being. Survey items related to the importance of common care and management interactions and who taught youth those interactions derived from a previous instrument. Additional items used videos and a Likert scale measuring if the horse in the video was not distressed, slightly distressed, somewhat distressed, moderately distressed, or very distressed. Videos were selected based on consistency of evaluation of distress by panelists and demonstration of a range of levels of distress for all items. The survey was distributed to members of a youth (ages 8-18) horse club (n=23). Youth had no previous education on horse well-being or welfare. The welfare assessment scale was found to be highly reliable (34 items; Cronbach's alpha = .868). A one-way ANOVA compared means of youth responses to the videos against experts and found no significant differences ($P>0.05$) between the amounts of distress youth detected compared to the distress identified by the panel. This study demonstrated that this instrument has potential to analyse youth perceptions within equine welfare. This survey will be tested with larger populations to determine effectiveness as an assessment of youth perceptions of behaviors impacting horse welfare, and to determine if other factors correlate to perceptions of horse welfare.

Keywords: equine; welfare; fear; distress; youth; perception