Australian Horse Welfare & Well-being Survey Analysis

June 2013



Prepared by:

Dr Larissa Clarkson & Dr Kirrilly Thompson

The Appleton Institute,
Central Queensland University
http://www.cqu.edu.au/appleton



Prepared for:

The Australian Horse Industry Council

Funded by:

Australian Animal Welfare Strategy

Acknowledgments

This survey would not have been possible without the 505 horse owners who generously gave their time and effort to complete it. We are very grateful for their engagement and ideas.

The authors would like to thank Dr Stuart Baulk for assistance with the layout and design of this report and Julie Fiedler, Coordinator, The Future of Horse Research in Australia AAWS Horse Organisation Welfare Resource Kit, for her support and insightful comments.

Table of contents

ACKNOWLEDGMENTS	1
TABLE OF CONTENTS	
EXECUTIVE SUMMARY	
The majority Australian horse	
THE MAJORITY AUSTRALIAN HORSE OWNER: POTENTIAL CONCERNS	
BACKGROUND	3
AIMS	4
METHOD	4
ANALYSIS	5
PARTICIPANTS	5
CONSIDERATIONS & LIMITATIONS	
RESULTS	
In which postcode does your horse live?	
What is your horse's age (in years) as of today's date?	
What breed, or what is the closest breed, that describes your horse?	
IF MALE, IS THE HORSE GELDED?	
IF YOUR HORSE WAS GELDED, WHO UNDERTOOK THE PROCEDURE?	
HOW IS YOUR HORSE PERMANENTLY IDENTIFIED? WHAT IS YOUR HORSE PRIMARILY USED FOR?	
IS YOUR HORSE CURRENTLY REGISTERED WITH A PERFORMANCE, RACING,	
BREED OR OTHER HORSE ORGANISATION?	
What is the most common daytime/night-time	
ACCOMMODATION FOR YOUR HORSE DURING COLD/HOT WEATHER?	
HOW OFTEN IS YOUR HORSE VISUALLY CHECKED FOR GENERAL HEALTH & WELL-BEING?	
How is water supplied to your horse?	
Does your horse require supplementary feeding of hay? Select one that best describes the hand feeding regime for your	
IF YOUR HORSE SPENDS TIME IN A PADDOCK, WHAT TYPE OF SHELTER FOR SHADE OR POOR WEATHER DOES YOUR CURRENT HORSE PADI	
HAVE?	
IF YOUR HORSE SPENDS TIME IN A PADDOCK, HOW MANY HORSES OCCUPY THE PADDOCK AT ANY ONE TIME?	14
What do you think the optimum size for a stable should be?	15
WHAT DISEASES/CONDITIONS IS YOUR HORSE CURRENTLY VACCINATED AGAINST?	15
HOW WOULD YOU BEST DESCRIBE HOW YOUR HORSE HAS ITS FEET KEPT?	
HOW OFTEN ARE YOUR HORSE'S FEET ATTENDED TO FOR TRIMMING/SHOEING?	
Who primarily provides trimming/shoeing services for the horse? Describe the person attending to the horse's feet	
HOW OFTEN ARE YOUR HORSE'S TEETH FULLY INSPECTED, INCLUDING BACK MOLARS?	
IF UNDERTAKEN, WHO PROVIDES DENTAL SERVICES FOR THE HORSE?	
How often is your horse de-wormed?	
On average, how often would a veterinarian examine your horse?	
IF YOUR HORSE IS CONFINED, HOW OFTEN IS ADDITIONAL EXERCISE PROVIDED?	
IF YOUR HORSE IS CONFINED, HOW IS THE EXERCISE PROVIDED?	22

RF	FERENCES	22
IM	PLICATIONS, RECOMMENDATIONS AND AREAS FOR FURTHER RESEARCH	32
	CONSIDERED IN RELATION TO ANY OF THE ANNEXURES, RECORD YOUR COMMENTS BELOW.	32
	THE AUSTRALIAN HORSE WELFARE PROTOCOL IS REVIEWED EACH YEAR. IF YOU HAVE ANY IDEAS, UPDATES OR NEW INFORMATION THAT COULD	BE
	KEY POINTS TO BE INCLUDED?	29
,	VOLUNTARY CODE OR OTHER INFORMATION WAS DEVELOPED TO PROVIDE GUIDANCE FOR HORSE OWNERS ON THIS TOPIC, WHAT DO YOU THINK ARE	THE
•	The National Horse Welfare Forum may have a topic for discussion relating to the confinement of horses. If a fact sheet, brochu	JRE,
	DESCRIBE HOW YOUR HORSE HAS HIS SOCIAL AND BEHAVIOURAL NEEDS MET AND/OR WHERE YOU WOULD LIKE TO MAKE IMPROVEMENTS	25
	Do you believe your horse has his social & behavioural needs met completely?	25
	IN YOUR EXPERIENCE, WHAT IS THE MOST COMMON REASON A HORSE IS WITHDRAWN FROM A TRAINING PROGRAM BEFORE COMPETITION?	24
:	SPORTING EVENTS?	23
	In your experience what are the most common reasons for a horse to permanently stop working or participating in recreation	۷&

Executive summary

In 2012 and 2013, the Australian Horse Industry Council surveyed a total of 505 Australian horse owners about how they kept their horses. Their responses provided the following snapshot of survey horses and horse-keeping practices at the time of data collection:

The majority Australian horse

At a very simplistic glance, the survey suggests that the 'average' or the 'majority' Australian horse:

- Is kept on the East coast (66%, excluding Tasmania)
- Is 11 years of age
- Is a thoroughbred (24%) not used primarily for racing, or a stock horse (14%)
- Is a male
- Is gelded
- Was gelded by an unknown person (55%) or a veterinarian (44%)
- Is used for dressage (17%), pleasure riding (15%, or 23% when combined with 'trail horse') or polocrosse (11%)
- Is registered with a performance, racing, breed or other horse organisation (59%)
- Lives in a paddock (80%), where it has access to natural shelter from the elements (62%) and shares its paddock with at least one other horse (74%)
- Is not confined and can canter at will (85%)
- Is exercised once per day where it is confined and cannot canter at will (9%)
- Is exercised by riding (51%) or lunging (30%), when it is confined
- Is checked daily (93%)
- Is watered by a trough or a drinker with an automatic refill (56%)
- Is fed on a combination of hand-feeding and grazing each day (33%), or as seasonally required (28%)
- Is vaccinated (81%) against tetanus (77%) and strangles (62%)
- Has its front and hind feet shod all year round (21%), and at least every 6 weeks (41%), by someone else (80%) who is an experienced, professional farrier (49%).
- Has its teeth fully inspected, including black molars on an annual basis (61%), by a trained, accredited equine dentist (68%)
- Is de-wormed every 6-8 weeks (41%)
- Receives veterinary examination only in the case of injury or illness (70%)
- Does not currently have a health concern or injury (23%), but if it did, would most likely have a general injury (15%) or hoof problem (12%)

The majority Australian horse owner:

- Thinks that the optimum size for a stable is 12m² or larger (72%)
- Holds injury or disease accountable for being the most common reason why a horse is withdrawn from a)
 work or participating in recreation and sporting events (81%), and b) from a training program before
 competition (86%)
- Strongly agrees that their horse has its social and behavioural needs met completely (56%)
- Considers their horse has its social and behavioural needs met by having unmediated company with another horse (59%), by living in a paddock (36%) and by having mediated contact with another horse (24%).

- Would like to see improvements for their horse by providing company/more company (46%) or a paddock situation (15%).
- Would like more information available on the topic of confinement and: feeding (30%), exercise requirements (29%) and size and dimensions of confinement spaces (20%).

Potential concerns

Whilst there were no glaring welfare issues identified in the majority of horse keeping practices, there are some areas of potential concern, as follows:

- 21% of survey horses are not identifiable (by brands, etc.)
- At least 1% of survey horses were not gelded by a veterinarian
- Overall, 18% of survey horses were permanently stabled
- As 94% of survey horses were checked at least once daily, up to 6% of survey horses may not be checked daily (some participants were unsure how often their horses were checked)
- 0.2% of horse owners do not know how often their horse is checked
- Technology is being relied on to automatically water 56% of survey horses. It is unknown how often the automatic refill is tested and if any 'fail to safe' measures are employed.
- 38% of survey horses rely on containers being manually filled. In a hot country like Australia, this practice must be conducted systematically.
- 29% of survey horses are watered from a dam, lake, creek or river. This practice may have negative environmental impact or pose risks to equine safety
- 7% of survey horses had no form of shelter, but were rugged
- 0.4% of survey horses had neither shelter, nor rugs
- 26% of survey horses did not have equine 'company' (i.e. unmediated interaction) when paddocked
- 7% of participants thought that the optimum size for a stable should be less than 12 square metres for the average sized horse (i.e. the AHWP guideline).
- 19% of survey horses are not vaccinated
- As 86% of people who pay someone to do their horse's hooves use 'an experienced, professional farrier' or a
 'vocationally trained accredited farrier', it could be assumed that 14% of survey horses had their hooves
 trimmed by someone without formally recognised accreditation or qualification. However, many of those
 choosing the 'other' option justified their use of a barefoot trimmer who may or may not have barefoot or
 more 'traditional' qualifications.
- 1% of survey horses never had their teeth fully inspected, 3% of survey horses rarely had their teeth fully inspected, and 7% of survey horses had their teeth fully inspected only when they appeared to need inspection. Together, this could be interpreted as 11% of survey horses not receiving regular dental care.
- Overall, 3.6% of survey horses are not regularly de-wormed
- 79% of survey horses are not regularly examined by a veterinarian
- 19% of confined survey horses are exercised less than once per day
- 6% of participants have found that inappropriate behaviour is the most common reason for a horse to permanently stop working or participating in recreation and sporting events.
- 4% of participants have found that inappropriate behaviour is the most common reason for a horse to be withdrawn from a training program before completion.
- 2.2% of participants did not agree that their horse had its social & behavioural needs met completely. An additional 6% neither agreed nor disagreed.

• 11% of participants felt that they could improve how their horse has its social and behavioural needs met through training

Background

The Australian Horse Industry Council (AHIC) conducted the 2012/2013 Australian Horse Health & Wellbeing Survey to understand how horses are kept in Australia today. The survey was funded through the Australian Animal Welfare Strategy (AAWS). It provided an opportunity for all horse industry & community sectors to understand current practices and identify future work that could occur within the AAWS framework.

The survey was designed and administered by the AHIC in conjunction with advice from stakeholders and expert advisors. In 2013, the AHIC engaged CQUni to undertake an analysis of the data. The authors of the present report were not involved in the design, promotion or delivery of the survey.

As explained in the information provided online to potential survey participants (2012):

The Australian Horse Industry Council (AHIC) member organisations and stakeholders are working on a continuous improvement pathway for horse welfare in Australia.

In August 2011 the AHIC's Industry Advisory Group developed, after a consultation process, the Australian Horse Welfare Protocol. This is a voluntary statement set around 8 key principles related to horse welfare and wellbeing.

All horse related organisations are invited to become a signatory to the Protocol. A copy of the Protocol and information about the sign up process can be found on http://www.australiananimalwelfare.com.au/content/horsewelfareprotocol

The AHIC, along with other major horse organisations, is represented on working groups associated with the Australian Animal Welfare Strategy (AAWS). This high level strategy is a statement and a plan for how Australia will continuously improve animal welfare in Australia. As a part of the AHIC working collaboratively with other animal representative groups, the horse industry and all levels of government, a set of goals have been identified for the horse sector in the medium term.

These are:

- a) to develop and promote the Australian Horse Welfare Protocol as a stepping stone to Standards & Guidelines for Horses
- b) to undertake a national survey to gather baseline data about horse care and welfare in Australia, to validate the Protocol, support continuous improvement and feed into the first annual review
- c) to conduct a national horse welfare forum, with the key purpose to review and update the Australian Horse Welfare Protocol and to consider other industry wide issues & topics

This is the survey, supported by the AAWS Working Group: Animals in Work, Entertainment, Recreation & Display. The summaries of the survey will be made public.

The survey was delivered in two waves: 2012 and 2013. The same questions were used in both waves, with one final question added to the 2013 wave. Wave 1 responses were received from the 8th of December 2011 to the 7th of March 2012. Wave 2 responses were received from the 12th of November 2012 to the 6th of February 2013.

Aims

The aims of this report are to:

- 1. Analyse findings with a focus on:
 - a. How horses are kept in Australia today
 - b. The 2011 Australia Horse Welfare Protocol (AHWP)
- 2. Present findings per question (in graphs with textual interpretation where necessary)
- 3. Identify any significant differences between the 2012 and 2013 survey waves (which may indicate emerging trends)

The report will also inform the development of the AAWS Horse Organisation Welfare Resource Kit.

Method

The survey was designed, promoted and delivered by the Australian Horse Industry Council in consultation with its members and a panel of invited subject experts. The survey tool comprised 38 questions. Five questions were openended.

The questions were (in order):

- 1. In which postcode does your horse live?
- 2. What is your horse's age (in years) as of today's date?
- 3. What breed, or what is the closest breed, that describes your horse?
- 4. Is your horse male or female?
- 5. If male, is the horse gelded?
- 6. If your horse was gelded, who undertook the procedure?
- 7. How is your horse permanently identified?
- 8. What is your horse primarily used for?
- 9. Is your horse currently registered with a performance, racing, breed or other horse organisation?
- 10. What is the most common daytime accommodation for your horse during cold weather?
- 11. What is the most common night-time accommodation for you horse during cold weather?
- 12. What is the most common daytime accommodation for your horse during hot weather?
- 13. What is the most common night-time accommodation for your horse during hot weather?
- 14. How often is your horse visually checked for general health & well-being?
- 15. How is water supplied to your horse?
- 16. Does your horse require supplementary feeding of hay?
- 17. Select one that best describes the hand-feeding regime for your horse.
- 18. If your horse spends time in a paddock, what type of shelter for shade or poor weather does your current horse paddock or yard have?
- 19. If your horse spends time in a paddock, how many horses occupy the paddock at any one time?
- 20. What do you think the optimum size for a stable should be?
- 21. What diseases/conditions is your horse currently vaccinated against?
- 22. How would you best describe how your horse has its feet kept?
- 23. How often are your horse's feet attended to for trimming/shoeing?
- 24. Who primarily provides trimming/shoeing services for the horse?
- 25. Describe the person attending to the horse's feet.
- 26. How often are your horse's teeth fully inspected, including black molars?

- 27. If undertaken, who provides dental services for the horse?
- 28. How often is your horse de-wormed?
- 29. On average, how often would a veterinarian examine your horse?
- 30. Describe the most common illnesses or health problem that are an issue for your horse
- 31. If your horse is confined, how often is additional exercise provides?
- 32. If your horse is confined, how is the exercise provided?
- 33. In your experience what are the most common reasons for a horse to permanently stop working or participating in recreation & sporting events?
- 34. In your experience, what is the most common reason a horse is withdrawn from a training program before competition?
- 35. Do you believe your horse has his social & behavioural needs met completely?
- 36. Describe how your horse has his social and behavioural needs met and/or where you would like to make improvements.
- 37. The Australian Horse Welfare Protocol is reviewed each year. If you have any ideas, updates or new information that could be considered in relation to any of the Annexures, record your comments below
- 38. The National Horse Welfare Forum 2013 may have a topic for discussion relating to the confinement of horses. If a fact sheet, brochure, voluntary code or other information was developed to provide guidance for horse owners on this topic, what do you think are the key points to be included? (included in survey 2012 wave 1 only).

Analysis

The survey responses were provided in Excel spread sheets requiring data cleaning and coding. Descriptive statistics were used to analyse open and closed-ended question responses. Open-ended question responses were inductively coded for this purpose. Chi-squares were used to identify any significant differences between the two survey waves (alpha = 0.05).

Participants

As noted above, the survey tool was administered twice; once in 2012 and again in 2013. A total of 505 horse owners responded to the survey. In 2012, 225 people took part in the survey and a further 280 responded in 2013.

While there was no restriction on whether people could respond to the survey in more than one year, analyses of the IP addresses used to respond to the survey indicated that the same IP address was used 11 times. This typically occurred within the same year, with only two occurrences where the same IP address was used in both 2012 and 2013. However, multiple horse owners may have used the same computer to complete the survey. We were unable to detect people who may have responded in both years but from a different computer. This also does not necessarily indicate that people are responding twice, as participants were able to drop out of the survey at any time and were not under any obligation to complete the whole survey. Eleven people stopped responding after question 9, while 1 other person stopped responded after question 20. The resulting analyses exclude these participants after they stopped responding.

Considerations & Limitations

This report should be read and understood with an appreciation of the following considerations and limitations:

- 1. There were no participants from the Northern Territory
- 2. Participants were asked to answer in relation to one horse only (regardless of how many horses they owned). They were provided with the following instructions:

This survey suits a single horse only. This survey does not have the intention of collecting "horse numbers" but is more about gaining an understanding of the wide ranging ways horses live in Australia through sample horses. Horse owners with more than one horse are invited to select a "representative" horse to complete the survey about who is typifies how that group of horses live.

If you own groups of horses who are kept quite differently, e.g. a retired group of horses in the back paddock and a group of young competition horses, you are invited to complete an additional survey utilising a new representative horse from the additional group/s.

A different email address will be required to complete each new survey.

Results

In which postcode does your horse live?

Responses to this question were classified by state and are displayed in table 1 below. There was no representation from owners of survey horses living in the Northern Territory. The majority of horses referenced in survey responses were kept in Australia's eastern states

SA	18%
ACT	7%
QLD	15%
NSW	35%
TAS	5%
VIC	23%

Table 1. Location of participants' horses arranged topographically and by percentages.

What is your horse's age (in years) as of today's date?

The age of the horses in the survey ranged from under 1 year to over 40 years old. The average age of horses in the survey was 11 years. The spread of the age range is shown in Figure 1, below. There was no difference between the 2012 and the 2013 sample in the mean age of horses.

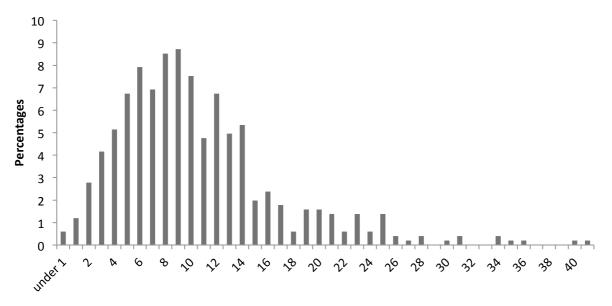


Figure 1. Frequency of responses (in percentages) to the question 'what is your horse's age in years'.

What breed, or what is the closest breed, that describes your horse?

Participants were able to select from 59 pre-determined categories. These included mules, donkeys and hinnys. Where a breed was not available, participants were able to select 'other'. The top 10 responses to the 'what breed is your horse?' question is listed in Table 1. These 10 breeds account for 77% of the horses owned by participants over the two years combined. The remaining breeds accounted for less than 2% of the horses in the survey each.

The most common breed of horse was the thoroughbred. By considering the uses for thoroughbred horses only (see the question below 'What is your horse primarily used for?'), 7.7% of thoroughbreds were identified as being used primarily for racing. The remaining 92% could be interpreted as non-racing or post-racing horses. That is, the majority of survey horses were thoroughbred horses not used primarily for racing.

BREED	2012	2013	OVERALL %
Thoroughbred	28	22	24
Australian Stock Horse	8	19	14
Quarter Horse	8	10	9
Warmblood	12	5	8
Arabian	6	8	7
Standardbred	8	5	7
Welsh Pony & Cob	3	5	4
Hanoverian	2	1	2
Andalusian	.4	2	1
Paint	2	1	1

Table 2. Top 10 Horse breeds represented in the survey in 2012 and 2013 as percentages.

Is your horse male or female?

Participants were able to select male or female. Almost two thirds of the survey horses were male, with only 36% of participants having female horses. There were a significantly higher percentage of female horses in the 2013 sample (40%) than in the 2012 sample (31%).

If male, is the horse gelded?

Participants were able to select yes or no. Overall, 94% of people who had male horses had their horses gelded. This did not differ between 2012 and 2013.

If your horse was gelded, who undertook the procedure?

Participants were able to select from 4 choices including:

- a) a veterinarian;
- b) a horseman or stockman, who can do castrations;
- c) unknown as someone else arranged it or
- d) unknown; it was done before I bought the horse.

Over half of participants (53%) stated that they did not know who had gelded the horse because it was done before they owned the horse. A further 44% had their horse gelded by a veterinarian. Only 2% said they did not know who had gelded their horse because someone else had arranged it and 1% said a horseman or stockman had performed the procedure.

How is your horse permanently identified?

Participants were able to select firebranding, freeze branding, microchipping or not permanently identified. Participants were also able to specify 'other' if their selection was not available. They could select more than one answer for this question. The most common method of permanently identifying a horse was freeze branding and microchipping. These were often used in combination with each other, and with other methods. Indeed, 27% of people said that they used multiple methods to identify their horse. For instance, while 41% of people said they have their horse's microchipped, only 14% said that they used this as the only method of identifying their horse. In 2013, the proportion of people who used microchipping dropped slightly and the proportion of people who stated that their horses are not permanently identified increased. This is reflected in Figure 2, below.

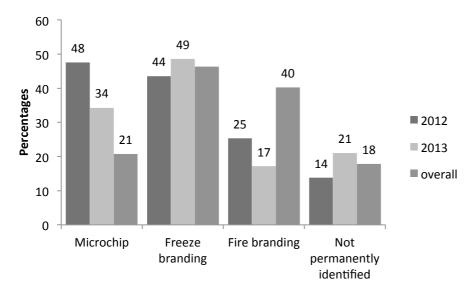


Figure 2. Percentage responses to the question 'How is your horse permanently identified' separated by year.

Overall, 18% of survey horses were not permanently identified. As the AHWP recommends that 'unique identification of horses linking to an owner should be promoted...', efforts should be made to engage this group of horse owners/carers.

What is your horse primarily used for?

Participants were asked to select from 90 different uses for their horses. Where their use was not included, participants were able to specify 'other'. The overall most common use for horses referred to in this survey was dressage, with 17% of the total sample using their horses for this purpose; this was followed closely by pleasure riding (15%) and polocrosse (11%). The top ten responses are given in the table below (Table 3). The percentages for each year are also given. As can be seen, the 2012 sample contained more dressage and eventing horses, while the 2013 sample contained more polocrosse horses.

	2012	2013	OVERALL %
Dressage	22	13	17
Pleasure riding	15	16	15
Polocrosse	.9	18	11
Trail horse (pleasure)	9	7	8
Eventing	10	2	6
Adult riding club	4	6	5
Pet	4	4	4
Retired	3	4	4
Breeding	3	4	3
Show jumping	4	2	3

Table 3. Top ten uses of horses in the sample, represented as percentages.

Is your horse currently registered with a performance, racing,

breed or other horse organisation?

Participants were able to select 'yes' or 'no'. Overall, 59% of participants currently have their horse registered with a performance, racing, breed or other horse organisation. 41% of survey horses are not registered with any

organisation. There is no difference between the 2012 sample and the 2013 sample with regards to how many have their survey horses registered. The higher rate of registration versus non-registration may be related to the number one breed type in the survey being thoroughbred.

What is the most common daytime/night-time accommodation for your horse during cold/hot weather?

Participants were able to select from stable, small yard (unable to self-exercise at the canter), large yard (able to self-exercise at the canter) and paddock. The most common accommodation for survey horses regardless of night-time or day-time or the weather was a paddock. Participants were more likely to put their horses in stables during the night-time and even more so during a cold night. 22 people stated that their horse has a combination of the options. For instance, is kept in a paddock with a shelter or a stable with a yard. 72% of people kept their horses in the same accommodation regardless of daytime/night-time or the weather. The majority of these (83%) kept their horses permanently in paddocks, while a further 6% kept their horses in a large yard. Only 10 participants (2%) kept their horses permanently stabled. There was no difference between 2012 and 2013 data for this question.

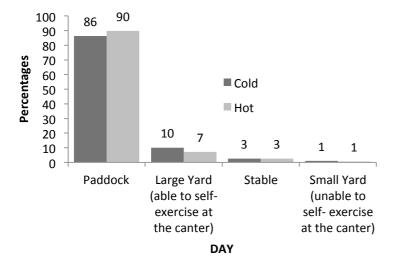
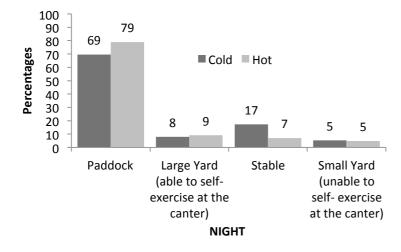


Figure 3 (in parts a and b): Responses to the questions regarding accommodation for horses during hot and cold weather during the day and night expressed as percentages



How often is your horse visually checked for general health & well-being?

Participants were asked how often their survey horses were checked visually for general health and wellbeing. They could select one of 7 pre-determined responses including daily, once or twice a week and when time permits. Overall, 94% of survey horses were checked daily. As can be seen in Figure 5, nearly two thirds (64%) of participants reported visually checking their horses twice or more per day. This is the minimum recommended by the AHWP (2011: 9), while a further 29% checked their horses daily. As 94% of survey horses were checked at least once daily, up to 6% of survey horses may not be checked daily (some participants were unsure how often their survey horses were checked).

Participants in 2013 were more likely to check their survey horses daily, while those in 2012 were more likely to check their survey horses twice or more per day. Only 3 participants in the entire sample visually check their horses less than once per week. All of those with older horses (30 years or older) checked their horses at least once per day and just over two thirds of those with older horses (67%) checked their horses twice per day.

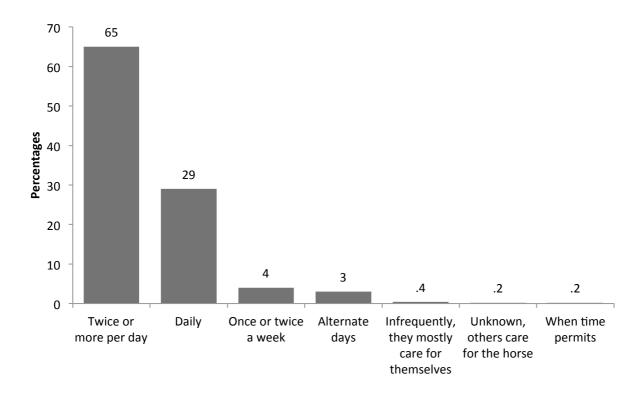


Figure 4. Responses to the question 'How often are you horses visually checked for general health and well-being.

How is water supplied to your horse?

Participants could select from 5 pre-determined responses or specify 'other' if they did not believe the provided categories reflected their response. Participants could select all responses that applied to their situation. The majority of participants (56%) used a trough or a drinker with an automatic refill to keep their horses watered while 38% used a container that needed to be refilled manually. 23% stated that a dam or lake provided water for their horses, while 6% had a creek or river. 27% of participants used multiple methods to keep their horses watered. These responses are reflected in Figure 5. There was no difference between 2011 and 2012 on how water was supplied to their horses.

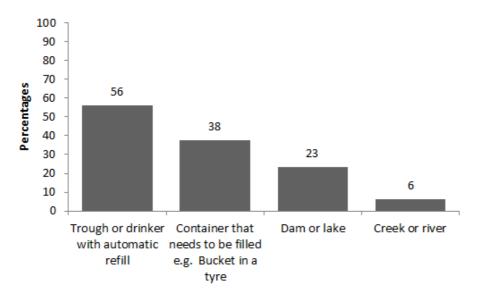
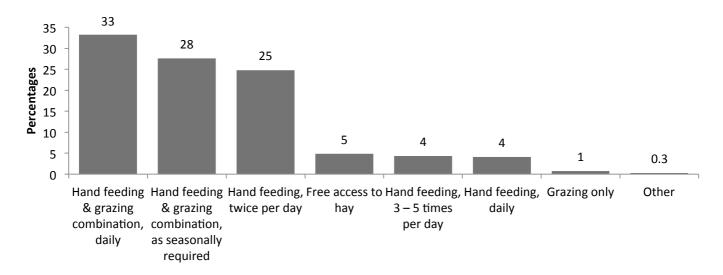


Figure 5. Responses to the question 'How is water supplied to your horse?'

Limitations. For those survey horses living in mixed conditions, water may have been supplied differently during the day as compared to the night.

Does your horse require supplementary feeding of hay? Select one that best describes the hand-feeding regime for your horse.

Participants could choose from a binary 'yes' or 'no' response. 79% of participants said that their horse requires supplementary feeding of hay. There was no difference between the 2012 and the 2013 sample on the requirement to supplement their horse's feed with hay. Participants could choose from 9 responses to describe their hand-feeding regime for their horse. This included free access to hay, grazing only, or hand feeding with an option of different frequencies. There was also an 'other' option where participants could specify a different feeding regime. A breakdown of the hand-feeding regime is given in Figure 6. The most common hand-feeding regime involves a combination of daily hand feeding and grazing (33%). This is followed by hand feeding and grazing as seasonally required (28%), and hand feeding and grazing twice per day (25%). The 2013 sample were more likely to report that they use a combination of hand feeding and grazing as seasonally required, while the 2012 group were more likely to say they use this feeding method daily.



Limitations: The term 'require' in the wording may have been interpreted differently by participants. Some nutritionists would argue that all horses need hay daily, whilst some owners may have a feeding regime devoid of hay (for ponies who founder for example and are kept on restricted diets). Different responses may have been elicited from the wording 'does your horse receive supplementary feeding of hay'?

Moreover, the question does not capture why people have elected to supplement their horse's feed with hay or not, or why they chose a particular feeding regime.

If your horse spends time in a paddock, what type of shelter for shade or poor weather does your current horse paddock or yard have?

Participants could choose from 5 pre-determined options with the addition of being able to specify a different type or shelter or shade in an 'other' box. These responses are displayed in Figure 8. Nearly 62% of participants said that there was natural shelter within the paddock, while 30% had a man-made shelter within their paddocks. A smaller percentage of participants (7%) said there was no shelter but used rugs. Those in 2012 were more likely to say they had a man-made shelter within a paddock, while 2013 participants were more likely to say that they had a natural shelter within a paddock or yard. Further, 3% of participants also added that they use rugs in addition to shelter.

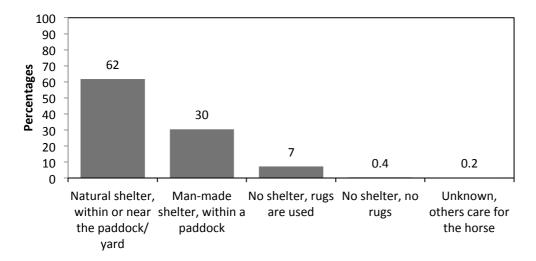


Figure 7. Responses to the question regarding shelter or shade available during poor weather, expressed as a percentage.

If your horse spends time in a paddock, how many horses occupy the paddock at any one time?

Participants who said their horse spent time in a paddock were asked to indicate how many horses occupied the paddock at any one time. Participants could select a number between 1 and 5, as well as a 'more than 5' option. As can be seen from Figure 9, the largest percentage has two horses in the paddock at any one time, and just over a quarter only keep 1 horse in the paddock. There was a significant difference between 2012 and 2013 on the number of horses in the paddock with 2013 having an average of 3.0 horses in the paddock and the 2012 population having 2.5 horses.

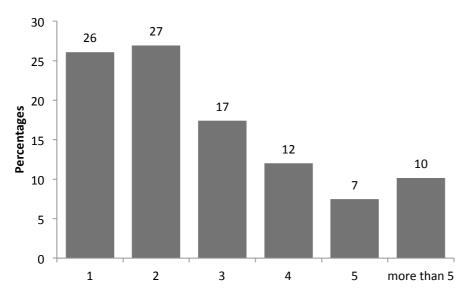


Figure 8. How many horses occupy the paddock at any one time, expressed as a percentage.

Limitation. With regard to paddocks containing only one horse, it is unknown whether the horse is able to see or have contact with other horses over the fence. We are also unaware whether survey horses may have other companion animals or regular contact with other horses.

What do you think the optimum size for a stable should be?

This was an open-ended question. According to guidelines set by the AHWP, 'stable size should be not less than 12 sq. metres for an average size horse with a height of not less than 2.4 metres (2011: 13). Participants were asked what they thought the optimum stable size should be. 72% stated a size that was at or over these minimum requirements, while 7% stated a size that was smaller than this guideline. For those who stated that the stable should be smaller, most responded that the stable should be 9 square meters. 19% of participants gave a non-numerical answer (i.e. as big as possible, depends on the size of the horse, "I do not believe in stabling horses") or an answer that was ambiguous (i.e. unable to determine whether dimensions were in feet or metres). 59 people (12%) chose not to respond to this question. There was no difference between the 2012 and 2013 sample on the optimum stable size.

Limitation: we don't know the size of the paddock or the ratio of horses to acreage, or the quality of soil, grazing, land. (not sure what this limitation question means)

What diseases/conditions is your horse currently vaccinated against?

Participants were asked what diseases or conditions their survey horses were currently vaccinated against. They had 5 pre-determined responses and a box where they could specify other. Participants could select all the options that applied. The AHWP guidelines recommend the 'routine vaccination of horses against tetanus' (2011:18).

19% have horses that are not currently vaccinated, either because they have not been vaccinated or because this vaccination is out of date. This category also includes people who don't know whether their horse is vaccinated. 77% of participants said their horse is currently vaccinated against tetanus and 62% have their horses vaccinated against strangles. Smaller percentages indicated that their survey horses are currently vaccinated against herpes (5%) and salmonella (3%). Two horses in the sample were vaccinated against horse influenza. These horses were both in the 2013 sample. Five participants have vaccinated their horses against Hendra. Figure 10 shows the percentage of horses vaccinated against these diseases by year. There was no significant difference in vaccinations between 2012 and 2013. There was no effect of state on what horses had received vaccinations against.

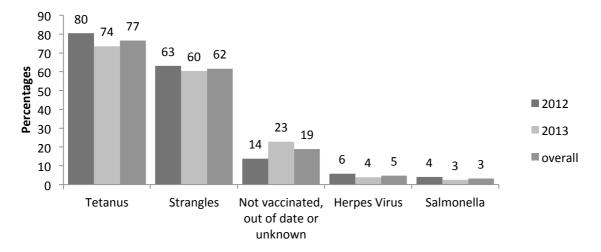


Figure 9. Most common diseases vaccinated against.

How would you best describe how your horse has its feet kept?

Participants could choose from 11 pre-determined responses that included shod, conventional trimming and barefoot trimming, and specified whether these are both front and hind and whether this changes if the horse is in or out of work. Overall, 21% of participants kept their horse's feet shod all the time. 15% used barefoot style trim for in work, and a further 14% used a barefoot style trim for in work and 14% shod their horse's hooves only when in work. 1.8% of horses appear to not receive any regular hoof care. Figure 10 shows a complete breakdown of all possible responses.

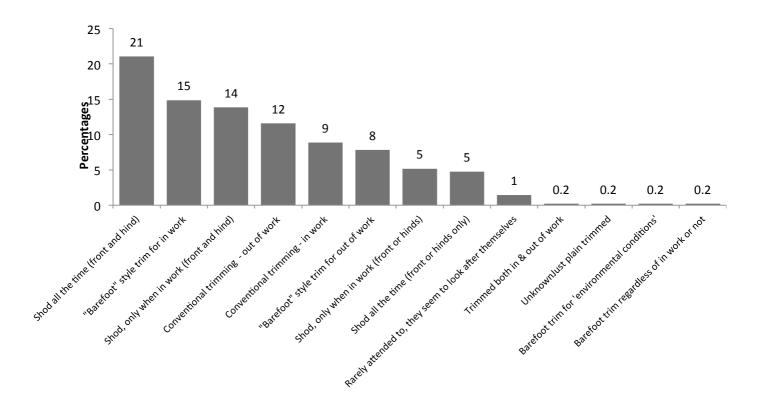


Figure 10. Responses to 'how are you horse's feet kept?'

How often are your horse's feet attended to for trimming/shoeing?

Participants were asked how often their horse's feet were attended to for trimming or shoeing. There were 11 choices of response that reflected different time intervals or responses such as 'when they appear to need it', and 'when a farrier gets to the district'. The AHWP guidelines recommend that 'shod horses should be inspected at least every six weeks for replacement or adjustment of shoes' and that unshod horses be '...regularly examined' as 'trimming may be required at least every six weeks' (2011:19).41% of participants had their horse's feet attended to at least every 6 weeks. Almost a third (32%) had their horse's feet attended to at the traditionally recommended interval of every 6-8 weeks. There was no difference between 2012 and 2013 on how often participants had their horse's feet attended to. These responses are displayed in Figure 11, below.

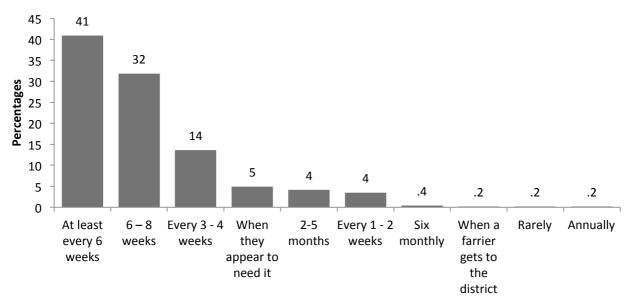


Figure 11. Top 10 responses to how often participants have their horse's feet attended to.

Of those who said their horse's feet were shod, 50% had their horse's feet attended to at least every 6 weeks, while a further 36% had their feet attended to every 6 – 8 weeks. 11% had their feet seen to every 3 to 4 weeks. 3.4% said they had their horse's feet seen to when they seemed to need it or every 2 to 5 months. .5% had their horse's feet attended to every 1 to 2 weeks.

Who primarily provides trimming/shoeing services for the horse? Describe the person attending to the horse's feet.

Participants could choose from 4 responses as well as being able to specify 'other'. Possible responses included self, a person paid for their services, an unpaid person, or no person attends to their feet. Figure 12 shows responses to this question. 80% pay someone for the service and 17% do the service themselves. The remainder use an unpaid person to shod or trim their horse's feet. Where services were provided, participants were asked to describe the person attending to the feet. This had 4 pre-determined responses including a vocationally trained, accredited farrier, an experienced professional farrier and a horse person who can do hooves. 49% use an experienced, professional farrier, while 37% used a vocationally trained accredited farrier. A further 14% said they use a horseperson that can do hooves. Only 2 people said they do not know who does it as someone else arranges it. Eighteen people said that a qualified or experienced barefoot trimmer attends to their horse's feet.

As 82% of people who pay someone to do their horse's hooves use 'an experienced, professional farrier' or a 'vocationally trained accredited farrier', it could be assumed that 18% of survey horses had their hooves trimmed by someone without formally recognised accreditation or qualification. However, many of those choosing the 'other' option justified their use of a barefoot trimmer who may or may not have barefoot or more 'traditional' qualifications.

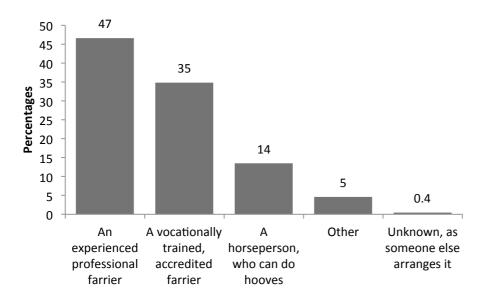


Figure 12. Responses to the question 'who provides the services' to their horse's feet.

How often are your horse's teeth fully inspected, including back molars?

Participants could choose from 8 pre-determined responses that included time periods as well as 'when they appear to need inspection' and 'rarely'. The AHWP guidelines state that 'horses' teeth should be checked at least once a year by a person suitably skilled and experienced in equine dentistry' (2011: 20). The majority of participants (61%) have their horse's teeth fully inspected annually, while 24% have them checked over 6 months. Smaller percentages had their horse's checked less regularly or when they appeared to need inspection. 1 in every 100 horses never had its teeth checked. These figures are displayed in Figure 13, below. There was no difference between the 2012 group and the 2013 group on how often they had their horse's teeth fully inspected.

As 1% of survey horses never had their teeth fully inspected, 3% of survey horses rarely had their teeth fully inspected, and 7% of survey horses had their teeth fully inspected only when they appeared to need inspection. Together, this could be interpreted as 11% of survey horses not receiving regular dental care.

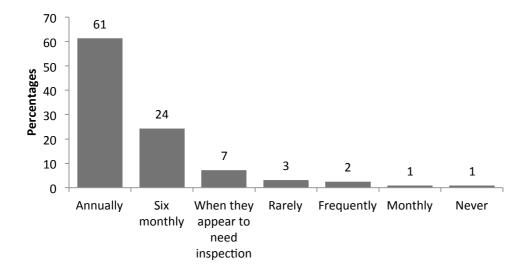


Figure 13. Responses to the question regarding frequency of checking horse's teeth for back molars.

Limitation: It is unknown how owners determine a need for dental inspection

If undertaken, who provides dental services for the horse?

Participants could chose 1 of 6 pre-determined responses to this question. Responses included a veterinarian, an equine dentist, and a horse person. Participants could also select other and specify a different answer. Overall, 69% stated that a trained, accredited equine dentist check their horse's teeth. While 19% said a veterinarian checked their horse's teeth. Fewer percentages used both a veterinarian and a horse dentist (8%), a horseperson who can do teeth (4%), a trained and accredited farrier (1%). 1 person did not know who check their horse's teeth as someone else arranges it. This is presented in Figure 14. Again, there was no difference between the 2012 and 2013 group on the type of service provider who carries out dental work on the survey horse's teeth.

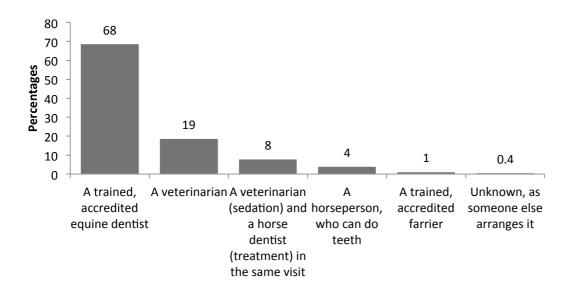


Figure 14. Frequency responses for that provides dental services for the horse.

How often is your horse de-wormed?

Participants could chose from 9 pre-determined responses to this quesiton or specify a different response. The AHWP guidelines recommend the practice of 'appropriate regular treatment for internal worm parasites...' (2011: 18). 41% of participants stated that they de-worm their horses at the traditionally recommended interval of every 6-8 weeks, while almost a quarter (24%) said they de-worm their horses seasonally. 17% said they de-worm their horses according to the manufacturer's instructions. A further 7% said that they de-worm their horses when necessary according to the results of a worm egg count. Smaller percentages de-worm their horses at other time points as demonstrated in the figure below. Overall, 3.6% of survey horses were not regularly de-wormed. These responses are represented by Figure 15, below.

There was a difference between the 2012 and the 2013 group. The 2012 group were more likely to de-worm their horses every 6-8 weeks, while the 2013 group were more likely to de-worm their horses either seasonally or 6 monthly.

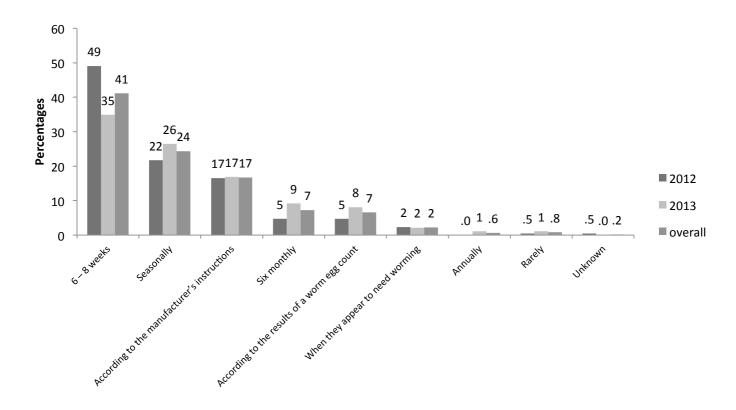


Figure 15. Responses to the question regarding frequency of worming.

Note. There is concern around those who say they only de-worm when the horse appears to need it, as damage may have already occurred to the horse by this stage. Also, the manufacturer's instructions may be the same as another category (e.g. 6-8 weeks).

On average, how often would a veterinarian examine your horse?

There were 6 pre-determined responses to this question and participants could select all that applied. These responses included 'only when there is an injury or illness' as well as 'as required, during a breeding program'. Participants could also specify a different response in the 'other' box. Figure 16 shows the frequency of responses to this question. Overall, the majority of participants stated that they have their horses examined by a vet only when there is an injury or illness. Almost 13% have their horses assessed annually and smaller percentages have them assessed as required by the various programs they are registered in. There was no difference between 2012 and 2013 with regards to how often horses were vet checked.

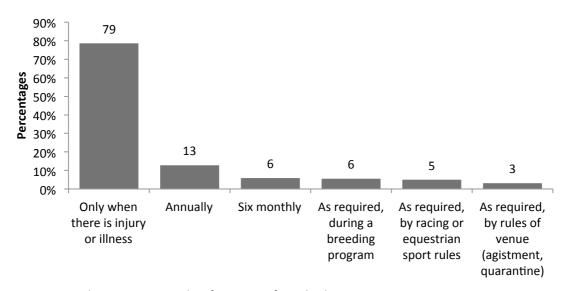


Figure 16. Responses to the question regarding frequency of vet checking.

Describe the most common illnesses or health problems that are an issue for your horse

Participants were given the opportunity to list the most common illnesses or health issues that their horse is facing. 5% chose to not answer this question. Some people provided more than one answer to this question. Answers were coded by type of illness or area of concern. Almost a quarter of participants (23%) said their horses do not currently have any health concerns or injuries. The most common health problem was injury, with 15% of participants reporting an injured horse. A further 12% reported hoof problems in their horses. The remaining illnesses and injuries that concerned at or over 2% of the sample are outlined below. These make up 82% of the total health issues raised in the survey. Other concerns that affected less than 2% of the sample included skin conditions, wind sucking, Queensland itch, laminitis and back issues. The top 13 responses are given in Figure 17.

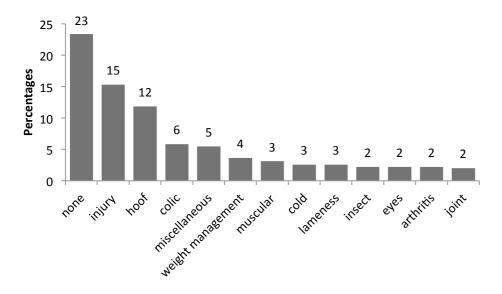


Figure 17. Top 13 responses to the question about what illnesses or injuries that a participant's horse had at the time of participation

If your horse is confined, how often is additional exercise provided?

Participants could choose from 8 responses that corresponded to a frequency (i.e. more than twice per day, weekly). Participants were instructed that confined means that the horse is unable to canter at will. As can be seen in the figure below, the majority of participants (85%) stated that their horses are not confined, 59% of those whose horses are confined exercise them once per day, while a further 23% exercise them more than twice per day, and 18% of participants whose horses are confined exercise them less than once per day. This level of exercise does not meet the AHWP minimum standard of daily exercise for stabled or yarded horses (2011:12). These responses are shown in Figure 18, below.

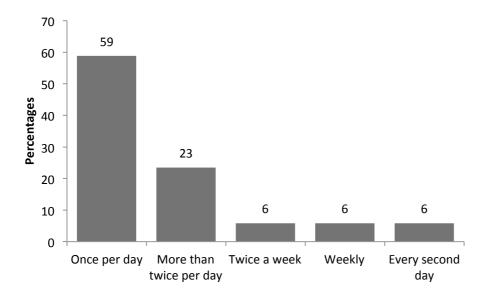


Figure 18. Responses to the question regarding frequency of exercise.

Limitation: 'Less than weekly' was the option of least frequent exercise. It may be important to distinguish between fortnightly, monthly, once a quarter, only during a particular season etc.

If your horse is confined, how is the exercise provided?

Participants were given 12 pre-determined responses to this question and had the ability to specify a different response in 'other'. Responses included riding, driving, treadmill, and ponying. Participants were able to tick all options that applied to this question. 51% of participants exercise their horse by riding, while 30% provide exercise by lunging. A further 20% exercise their horses by leading in hand and 9% use ponying (leading from another horse) to exercise their horse. Smaller percentages use long reigning (5%), driving (3%), walking machine (2%) a swimming pool or beach (2%). 1 person did not know how their horse was exercised. These responses are shown in Figure 19, below.

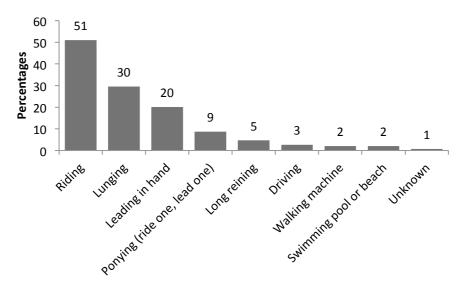


Figure 19. Top 9 responses to the question regarding exercise type.

Limitation: There is an inability to discern between riding constructed as work for the horse (training, arena work etc.) versus riding constructed as a break from training (pleasure ride, ride out, riding for cardiovascular rather than gymnastic fitness).

In your experience what are the most common reasons for a horse to permanently stop working or participating in recreation & sporting events?

Participants were asked to indicate what they have experienced the most common reasons for a horse to permanently stop working or participating in recreation and sporting events. They were able to select from 4 predetermined responses including injury or disease, inappropriate behaviour, poor performance or retired for breeding purposes. Participants could also specify another reason if they elected to. As can be seen in Figure 20, the majority (81%) cited injury or disease as the most common reasons, while smaller percentages as outlined below noted other reasons including retired for breeding purposes, poor performance and inappropriate behaviour. There was no difference between the 2012 and 2013 groups in response to this question.

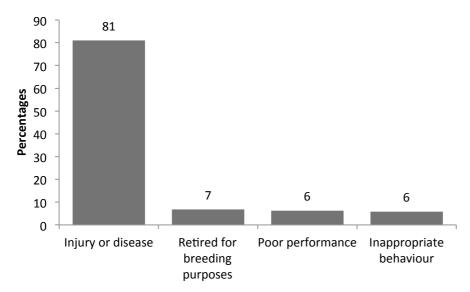


Figure 20. Responses to the most common reasons a horse is withdrawn from work or participating in recreation and sporting events.

Limitation: It is unclear if poor performance was interpreted in relation to the horse's aptitude for particular activities, or if it was interpreted in relation to other categories such as injury or inappropriate behaviour.

In your experience, what is the most common reason a horse is withdrawn from a training program before competition?

Participants were asked what the most common reason a horse in withdrawn from a training program before completion. They could choose from 4 pre-determined responses including injury or disease, inappropriate behaviour, poor performance and sale, lease or change of trainer. Again, the most common reason was injury or disease (86%), followed by poor performance (9%), inappropriate behaviour (4%) and sale, lease or change of trainer (1%). These responses can be seen in Figure 21. There was no difference between the 2012 and 2013 sample on the response to this question.

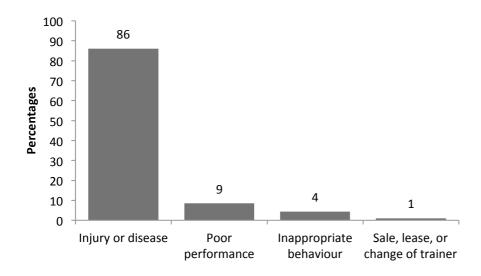


Figure 21. Responses to why horses are withdrawn from a training program before competition.

Do you believe your horse has his social & behavioural needs met completely?

Participants could choose from 5 responses that ranged from strongly agree to strongly disagree. As can be seen in Figure 22, the majority (56%) strongly agreed to the statement that their horse's social and behavioural needs were more completely. Over a third (36%) agreed to this statement. Smaller percentages neither agreed nor disagreed (6%), or disagreed (2%). Including those who strongly disagreed, 2.2% of participants did not agree that their horse had its social & behavioural needs met completely. Only one participant strongly disagreed with this statement.

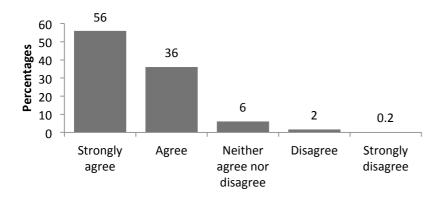


Figure 22. Responses to the question 'do you believe your horse has its social and behavioural needs met?'

Limitation: It is unclear what beliefs were held by the 6% of participants who 'neither agreed nor disagreed' (e.g. they may have been unsure or had no opinion, or felt that 'complete' was an unachievable goal.

Describe how your horse has his social and behavioural needs met and/or where you would like to make improvements.

Participants were given the opportunity to describe how their horse has its social and behavioural needs met and to specify where they would like to see improvements made. The top 12 responses to the first part of this question are shown in Figure 23. Table 3 shows the coding structure for this question. The majority (59%) mentioned that their horse has company. This was primarily the company of other horses but 3 instances included the company of other animals including a cow and 2 sheep. This category also included references to the herd or mutual grooming. 36% stated that their horses were paddocked. This category included responses where horses had access to pasture, a variety of land and 'turn outs', and included responses where horses could express their normal behaviour. 24% said their horses have 'contact' with other horses, but this is mediated (e.g. over a fence or visual contact only).

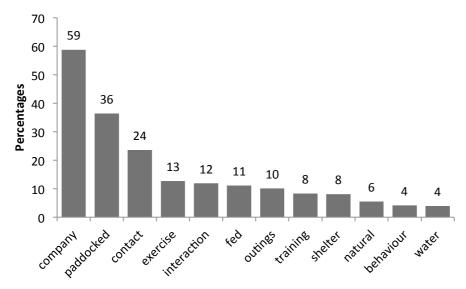


Figure 23. Top 12 responses to the question 'describe how your horse has its social and behavioural needs met'.

The RSPCA refers to the following Five Freedoms to determine an animal's physical and mental wellbeing and welfare.

- 1. Freedom from hunger and thirst: by ready access to fresh water and a diet to maintain full health and vigour.
- 2. Freedom from discomfort: by providing an appropriate environment including shelter and a comfortable resting area.
- 3. Freedom from pain, injury or disease: by prevention through rapid diagnosis and treatment.
- 4. Freedom to express normal behaviour: by providing sufficient space, proper facilities and company of the animal's own kind.
- 5. Freedom from fear and distress: by ensuring conditions and treatment which avoid mental suffering (http://kb.rspca.org.au/Five-freedoms-for-animals_318.html)

Participant responses to the question of how their horse has its social and behavioural needs met covered either directly or indirectly all five freedoms. However, there are subjective differences in interpretation. For example, the use of a windsucking collar could be interpreted either as enforcing normal behaviour or preventing behavioural expression. Indeed, the AHWP discourages the use of collars (2011:8). Moreover, there were instances where owners made decision over conflicting freedoms. For example, some owners would like their horse to have (more) unmediated company (freedom to express normal behaviours) but felt that the provision of company would lead to bullying or injury (thereby privileging freedom from pain, injury, disease, fear and distress).

CATEGORY & CODE	TYPES OF RESPONSES
Company	Horse resides with other horses
Paddocked	Permanently or often paddocked, natural habitat, allows natural behaviour, interesting paddock (trees, creek, etc.)
Contact	Has contact with other horses, i.e. over the fence
Exercise	Exercised regularly, variety in exercise routine
Interaction	Regular human/horse interaction, handled regularly
Fed Good feed, hand fed where necessary, slow feed	
Outings	Taken to club, competitions and shows
Training Horse has had training in ground work, developed manners, rewards good	
	bad choices made uncomfortable
Shelter	Natural and man-made shelter

Natural	Using natural horsemanship
Behaviour	Comments about behaviour and manners of the horse. Some comments about using
	horse behaviour to guide perceptions of whether horse is happy and well
Water	Access to fresh, clean water
Нарру	Comments about horse appears to be happy
Health	Receives adequate attention from vet, farrier, chiropractor, equine dentist; wormed
	regularly; has physical needs met
Misc.	Miscellaneous responses
Play	Ability to play with other horses
Rugged	Rugged when required
Spelling	Horse is given time with other horses with minimal human contact, 'bushed', turnout
companion	Horse has a companion. Includes sheep, cows.
Loved	People commented on horse being/feeling loved
supervision	Horse regularly checked for physical/mental un-wellness
Variety	Access to horse toys, varied routine
Space	Plenty of room to move, grazing room
Enrich	Training and attention, variety, toys, socialisation, stimulation
groomed	Includes brushed, groomed
windsucking collar	Has windsucking collar
Bitless	Ridden in bitless bridle
Routine	Has daily routine, exercise routine, feeding routine
lays down	Sleeps laying down indicates lack of stress
Care	Regular care
Riding	Regular riding
Dam	Ability to frolic in dam in hot weather

Table 4. Coding structure of 'how your horse has its social and behavioural needs met'

Only 126 people responded to the second part of this question "where do you think you could make improvements is given below. The top 11 responses are given in the figure below (Figure 24). The coding structure is given in table 4. The most common response (46%) was about their horse having more company. This included responses to having a herd environment (more than one other companion) as well as having just another paddock companion (where the horse only had 'contact' at the time of the survey). This also included responses about having different age distributions amongst a 'herd' or 'kinder' company where owners thought their horse was being 'bossed' by a paddock companion. 15% of participants made comments about the paddock their horse was kept in. 74% of these said that they wanted their paddock to be larger, while the remainder said they would like their survey horses to spend more time in paddocks. 11% said they would like their survey horses to receive more training, with more time to train and more access to training facilities common responses.

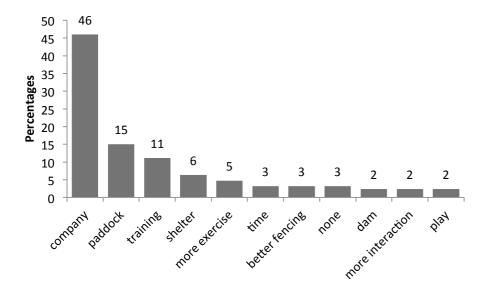


Figure 24. Responses to part (b), 'where would you like to see improvements?'

It is worth noting that some participants wanted to – or felt the need to – mention that their horse is 'loved' or is a member of the family. This may reveal a defensive response, a friendly engagement with the survey, or something else. Given the adage, 'killing with kindness', the idea of love as a contributor to a horse's welfare may require further exploration.

CATEGORY & CODING	CATEGORY DEFINITION AND INCLUSIONS
company	Unmediated contact with another horse
paddock	Larger paddock, more paddocking, more varied terrain
training	
shelter	Build shelters in paddock, improve shelters for extreme weather
more exercise	Needs to ride more, ride in different places, riding to improve behaviour
more time	More time to ride, more time to spend with horse, have horse on own property
better fencing	Afford better fencing, less barbed wire
dam	Would like dam for hot weather
play	More play with others
enrich	Introduce more things for the horse to play with
grazing	Access to grazing
more trails	More safe trails
socialising	More experience socialising when riding
improved pasture	Improve quality of grass
rolling area	Sand pit for rolling
breeding	Would like to breed
group riding	Group riding to improve sociability, more outings
more variety	Vary type of riding to minimise boredom
feeding yards	Feeding yards to horses can eat individually
more knowledge	Improve knowledge of horse care
more competition	More regular competition

Table 5. Coding and categorisation of 'where would you like to see improvements'

Interestingly, some participants felt that training would increase the ability for their horse to have its social and behavioural needs met. This may relate to a belief that a 'naughty' or 'difficult' horse is an unhappy horse. The

particular beliefs behind responses to this question, and their relationship to other beliefs, requires further investigation as there are welfare implications.

Limitation: The wording to this question was double-barrelled:

- a) Describe how your horse has his social and behavioural needs met and/or
- b) Where you would like to make improvements.

Not all participants addressed both parts of the question in their responses. Whilst it was mostly clear which part of the question was being addressed, decisions were sometimes made during coding to attribute a response to a part of the question.

The National Horse Welfare Forum may have a topic for discussion relating to the confinement of horses. If a fact sheet, brochure, voluntary code or other information was developed to provide guidance for horse owners on this topic, what do you think are the key points to be included?

Participants were given the opportunity to state what key points they would like to see included in a fact sheet, brochure, voluntary code or other information that could provide guidance for horse owners. The top 25 topics are given in the figure below (Figure 25). The most common response was feeding, with 30% indicating that a brochure or advice on this topic would be appreciated. This response includes reference to slow feeding, roughage, grazing, the number of meals per day both in general and the amount required for exercise and discipline needs, and general horse nutrition. 29% made comments relating to exercise including appropriate type and amount. 20% made comments relating to size. This category included comments about freedom to move, space to run and the minimum and optimum size of stables and yards. 14% would like to see information on enrichment. This category refers to reducing boredom, providing variety and stimulation for the horse.

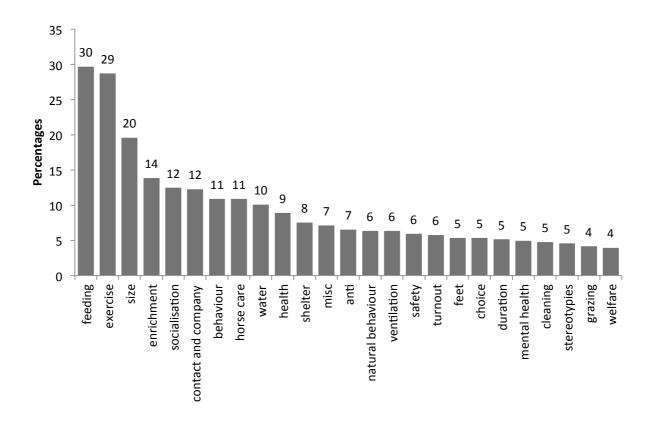


Figure 25. The top 25 topics that participants would like to see addressed.

Table 6 (below) outlines all the categories identified in this survey listen in order of frequency of mention. In many cases, participants have just given single word responses with no elaboration (i.e. have just said 'teeth'), there is scope for future research to extract more detail using focus groups, detailed surveys, and so forth. The sheer breadth of categories identified in responses suggests that overall, participants are aware of the multiple ways in which confinement intersects with other health (mental and physical), safety and behavioural issues.

CATEGORY & CODING	CATEGORY DEFINITION AND INCLUSIONS
Feeding	How much food, what type of food etc. problem of food on the ground, stomach
	problems during confinement.
Exercise	Responses about exercise requirements, types and routines.
Size	Size of the stable, size of the yard.
Enrichment	Making sure horse is not bored
Socialisation	Ability to socialise with other horses
contact and company	Must have contact with other horse's physical and 'other the fence'
Behaviour	Appropriate horse behaviour, horses having high energy feed but low exercise having behavioural problems.
horse care	Vet checks, guidelines on basic horse care, worming etc.
Water	Amount of water and importance of regular checking of water. Water temperature is important.
Health	Problems associated with confinement
Shelter	For varied conditions (wind, snow, heat). Common sense approach for portable yards at competitions.
misc.	Miscellaneous responses, i.e. access to public forums, having horses of the same

	age together.
anti	Anti was used to categorise responses where participants were against stabling
	altogether.
natural behaviour	Five freedoms, horse being able to live in herd environment. Problems associated
natarar benaviour	with people humanising horses (i.e. over rugging).
ventilation	Importance of a well-ventilated stable.
safety	Fence safety
turnout	Access to paddocks for work horses.
feet	Concerns about proper hoof care.
choice	Managing alternatives to confinement.
duration	Appropriate schedules for feeding, health checks.
mental health	How does confinement affect mental health, mental stimulation to prevent
	boredom.
cleaning	Proper hygiene routine
stereotypies	Prevention and treatment of stereotypies
grazing	Importance of horse being able to graze
welfare	Stopping cruelty
teeth	Concerns responses about teeth health.
design and material	Design of stable for Australian conditions, design so horse is able to see out,
3	doesn't feel "boxed" etc.
fencing	Suitable and safe fencing materials
bedding	Depth of bedding, bedding being changed.
temperature	Overheating of water on hot days, managing heat load, wind chill etc.
supervision	Minimum time frames for visual checks.
pasture	Safe pasture, managing pastures.
play	Horses should be able to play.
paddock management	Rotate, slash and rest paddocks; weed and junk removal.
hygiene	Of bedding and stable
vermin & pest control	Protection against insects, wildlife, dogs, vermin.
disaster planning	Danger of fire especially in stables. Bush fire guidelines needed.
aged horses	Taking care of retired horses
waste	Footage, drainage and removal of waste.
stocking and overcrowding	Size and stocking numbers in paddocks/stables
location	To other horses.
race horses	Treatment of race horses, size of stables
stallions	Over confinement of stallions
traveling	Guidelines for adequate ventilation and rest breaks
routine	Monitoring routine for boredom
foaling	Surface types for foaling
cost	Cost of stabling
definitions	Where participants would like definitions. i.e. what defines confinement or social
	requirements.
regulations	Where to find council/state legislation on fencing
quarantine	Quarantine stable to separate sick horses.

Table 6. Coding and responses to the topics participants would like to see addressed.

The Australian Horse Welfare Protocol is reviewed each year. If you have any ideas, updates or new information that could be considered in relation to any of the Annexures, record your comments below.

Responses to this question were not clearly focussed on the topic of confinement. As shown in the exhaustive list below, there were few consistent coding categories across the responses provided by 42 participants.

Abuse (X2), feeding and exercise (X2), barefoot trimming, basic care, bitless bridles in pony club and competition, bushfire advice, cruelty (X3), delete captive bolt from AHWP, dentistry, dental power tool ban (X2), dissemination, drug use, education, equine behaviour, euthanasia, exercise, five freedoms, floating, float maintenance, horse behaviour, horse care requirements, horse wastage, mosquito control, nanny mares, neglect (X3), NFPs, none, overbreeding (x2), parasite control, pollution and contamination, process for reporting cruelty (x2), professional registration and qualification, reporting neglect (X2), prosecution/conviction (X5), RSPCA laws, jurisdiction and power (X2), rugging [incl overrugging] (X4), saleyards, seizing horses (X2), the protocol, time without exercise, time without feed (X2), toxic plants, traveling standards, understanding pain in horses, warm up protocol, weeds, welfare & policies (X2), whipping racehorses.

Implications, recommendations and areas for further research

It is suggested that the lists provided above around the 'majority Australian horse', 'the majority Australian horse owner' and 'potential concerns', together with the entire contents of this report, be considered systematically by AHIC and other expert stakeholders to identify potential implications, recommendations and areas for further research or consideration for policy development. However, this report has identified the following specific questions that could be incorporated in further research:

- Overall, 18% of survey horses were not permanently identified. As the AHWP recommends that 'unique identification of horses linking to an owner should be promoted...', efforts should be made to engage this group of horse owners/carers and identify the drivers for horse identification.
- How often do owners/carers check that automatically waterers are refilling?
- For how many hours per day are horses typically confined?
- How do horse owners/carers determine a need for dental care, if it is not undertaken regularly?
- When owners/carers only de-worm 'when their horse appears to need it', how is that determined?
- How do owners/carers define, interpret and apply the Five Freedom principles to their horses
- How do owners/carers make decisions when they feel that one 'freedom' compromises another
- How do ideas of love and care impact decision-making and behaviour? For example, some participants wanted to or felt the need to mention that their horse is 'loved' or is a member of the family. This may reveal a defensive response, a friendly engagement with the survey, or something else. Given the adage, 'killing with kindness', the idea of love as a contributor to a horse's welfare may require further exploration.
- How do owners/carers perceive the relationship between natural behaviour and expected behaviour? For example, some participants felt that training would increase the ability for their horse to have its social and behavioural needs met. This may relate to a belief that a 'naughty' or 'difficult' horse is an unhappy horse. This belief, and its relation to others, requires further investigation, as there are welfare implications.

References

AUSTRALIAN HORSE INDUSTRY COUNCIL. 2011. Australian Horse Welfare Protocol. Available: http://www.horsecouncil.org.au/ahic/.