

Home,

from a Horse's Perspective



How the horse feels and sees our world!

Physical / Functional Domains

Nutrition

Environment

Physical Health

Behavior

Mental Domain

Negative Experiences

Positive Experiences

Welfare Status

Mental Experiences in Wild Animals: Scientifically Validating Measurable Welfare Indicators in Free-Roaming Horses by Andrea M. Harvey 1,* ,Ngaio J. Beausoleil 2ORCID,Daniel Ramp 1ORCID and David J. Mellor 2

What is Equine Cruelty?





Completely Controlled and Unnatural Environment

<https://horsesandpeople.com.au/open-the-gates-horse-welfare/>

To protect Equine Wellbeing



**Not only prevent physical suffering,
but promote positive emotional states**

Mellor, D.J. and Burns, M. (2020) Using the Five Domains Model to develop welfare assessment guidelines for Thoroughbred horses in New Zealand. *New Zealand Veterinary Journal* 68(3), 150-156. DOI: [10.1080/00480169.2020.1715900](https://doi.org/10.1080/00480169.2020.1715900)

Equine Ethology



Scientific study of horses
in their natural environment

[The importance of ethology in understanding the behaviour of the horse](#)
[- GOODWIN - 1999 - Equine Veterinary Journal - Wiley Online Library](#)

Evolution shaped the way horses form, retain and use memories



Wild horses recognize dangerous situations
Remember where to find food and water sources

<https://practicalhorsemanmag.com/health-archive-memory/>

Link experiences to circumstances



See their world through senses in order to survive

<https://practicalhorsemanmag.com/health-archive-memory/>



[Long-term and Sequential Memory of Horses \(scienceprofonline.org\)](http://scienceprofonline.org)

5 Traits for Survival

1. Always be on the alert
2. Find safety in numbers
3. Develop a hierarchy
4. Keep feet free from any encumbrance
5. Never allow a predator to get on the back



Never live alone by choice...



Prey Animals

Advice & welfare: Understanding Horse Behaviour • SPCA New Zealand

Family Bands



Social interaction, companionship, and safety.

Drake, Jane,. *Wild Horses of the West*, 2020 Gibbs Smith



One or two close bonds within a group

Kjellberg,Linda, Horse stables in the 21st century : aspects of management, behaviour and health.

<https://publications.slu.se/?file=publ/show&id=119365>



Horses in nature have very few fights

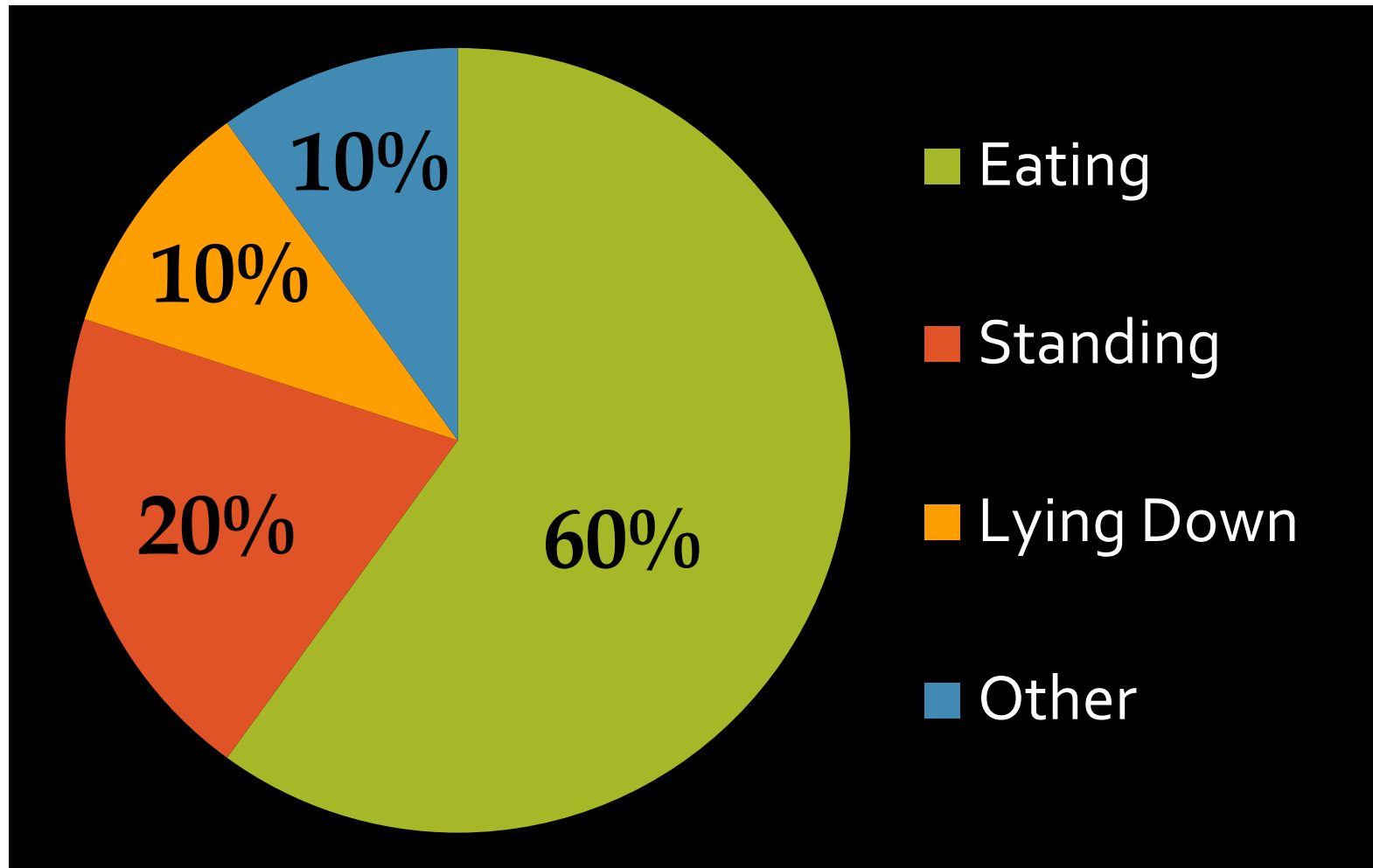
<https://horsesandpeople.com.au/open-the-gates-horse-welfare/>



A herd's pecking order is not always linear, constantly changing

In the Wild

Positive mental experiences



Boyd 1991; Berman 1993; Fleurance et al. 2001

Varied Environment



Tolerate low nutritional foods



They can find water
Eat and drink in a group

[Environmental Enrichment for the Horse:
The Need to Forage | The IAABC JOURNAL](#)

Move 10 to 40 miles a day



Natural Living – Brighter Equines

Two to five hours of sleep



Slow wave sleep standing up
REM sleep: 30 minutes.

Water-resistant coats



Specialized vascular systems and circulatory patterns within their hooves that maintain adequate temperatures

[The Stresses of Easy Living - Horse Illustrated](#)

Sentient



**Able to perceive or
feel things and
show their emotions**

Social



**Communicate
using Body Language**

[Advice & welfare: Understanding
Horse Behaviour • SPCA New Zealand](#)

Today's Horses Needs are the Same!



- The ability to be social
- To be able to move at will
- To express natural behaviors and emotions
- To have low quality forage available 24/7.

Convenient to Humans...

We take away:

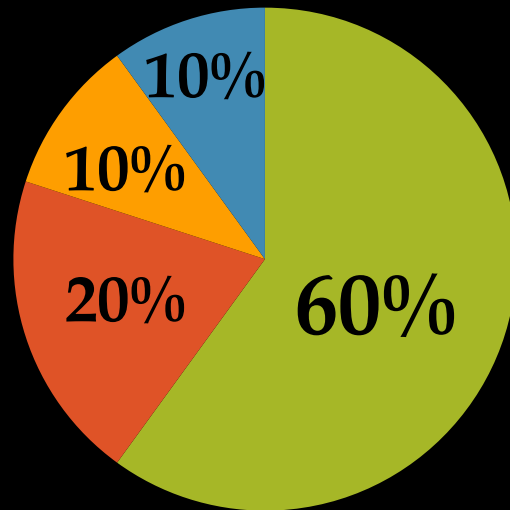
- Food choices
- Mate choices
- Social interaction
- Maternal behavior
- Reproductive success
- Movement, freedom to roam
- Freedom to choose their friends



[Is "Natural" Better for Our Horses? | Horse Journals](#)

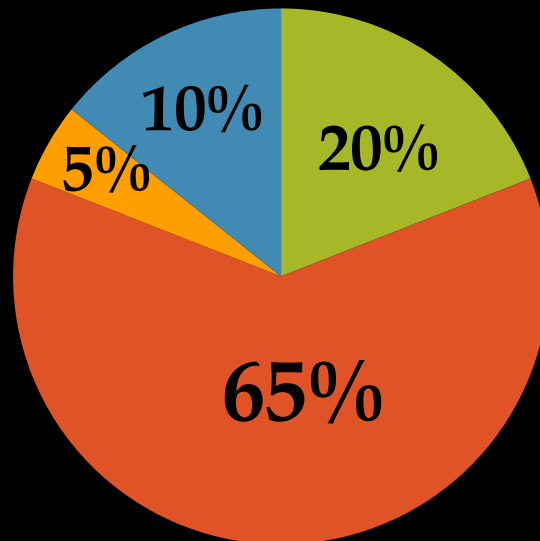
[Horse Behaviour: Evolution, Domestication and Feralisation | SpringerLink](#)

In the Wild



- Eating
- Standing
- Lying Down
- Socializing

Domestic



- Eating
- Standing
- Resting
- Other

“The Diseases of Domestication”



Occur in captive animals
They never have a real purpose.

Create their own stimuli:

Vices – Undesirable behavior

Stereotypes - Frequent repetition of same movement

Locomotor Stereotypes

- Weaving
- Head Bobbing
- Stall Walking



Oral Stereotypes

- Cribbing
- Windsucking
- Wood Chewing

[‘Vices’ in Horses Are ‘Diseases of Domestication’ – The Horse](#)

Results

- Colic
- Ulcers
- Stocking up
- Aggression
- Depression
- Respiratory Problems
- Stress and Frustration



['Vices' in Horses Are 'Diseases of Domestication' - The Horse](#)

A Welfare Problem

Deprivation of horses' biological needs



“Never been observed in free-ranging feral horses.”

Where they can engage in behaviors of their choice.

Research

16 horses prone to
cribbing, aggression



20 days,
no aggression,
minimal cribbing

Cribbing and
aggression returned



[Yarnell et al. \(2015\)](https://doi.org/10.1016/j.physbeh.2015.02.040)

<https://doi.org/10.1016/j.physbeh.2015.02.040>

Research



Confinement & isolation increases aggression, biting

[The Stresses of Easy Living - Horse Illustrated](#)



Ethical and Effective
Management
of Environment

Based on
Needs and Natural Behaviors

Anthropomorphic

We must not make decisions about horses and their environment based on how humans feel

We must not assign human traits to our horses!



Decisions must be based on the best available scientific information, independent of a our feelings!

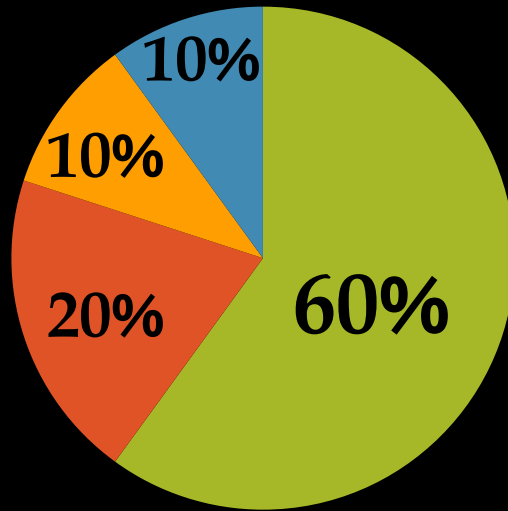
Horses don't share your priorities



The most important and memorable things are related to survival – getting food and avoiding predators.

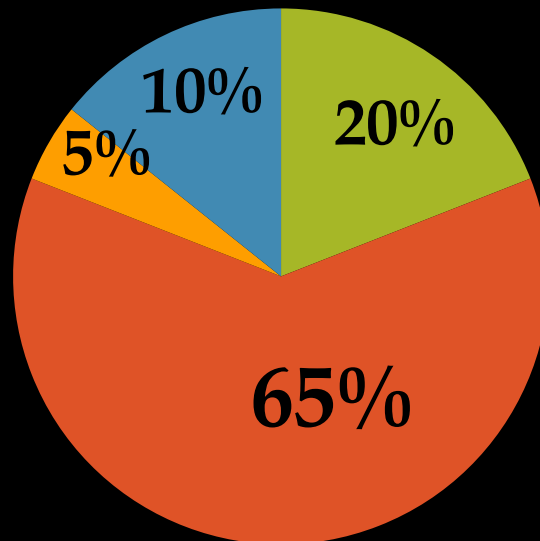
<https://practicalhorsemanmag.com/health-archive-memory/>

In the Wild



- Eating
- Standing
- Lying Down
- Socializing

Domestic



- Eating
- Standing
- Resting
- Other

Horses



People



Nina Echolm - Fry
University of Denver
Institute for the Human Animal Connection

Horses



People



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University of Denver
Institute for the Human Animal Connection

Horses



People



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University of Denver
Institute for the Human Animal Connection



Free Choice Forage

Eating and movement go together



**Moving while grazing helps keep circulation going,
and continual eating keeps the digestive tract moving**

[What horses need and natural behaviour | Blue Cross](https://thehorse.com/120139/feeding-to-prevent-colic/)

<https://thehorse.com/120139/feeding-to-prevent-colic/>

Free Choice Forage

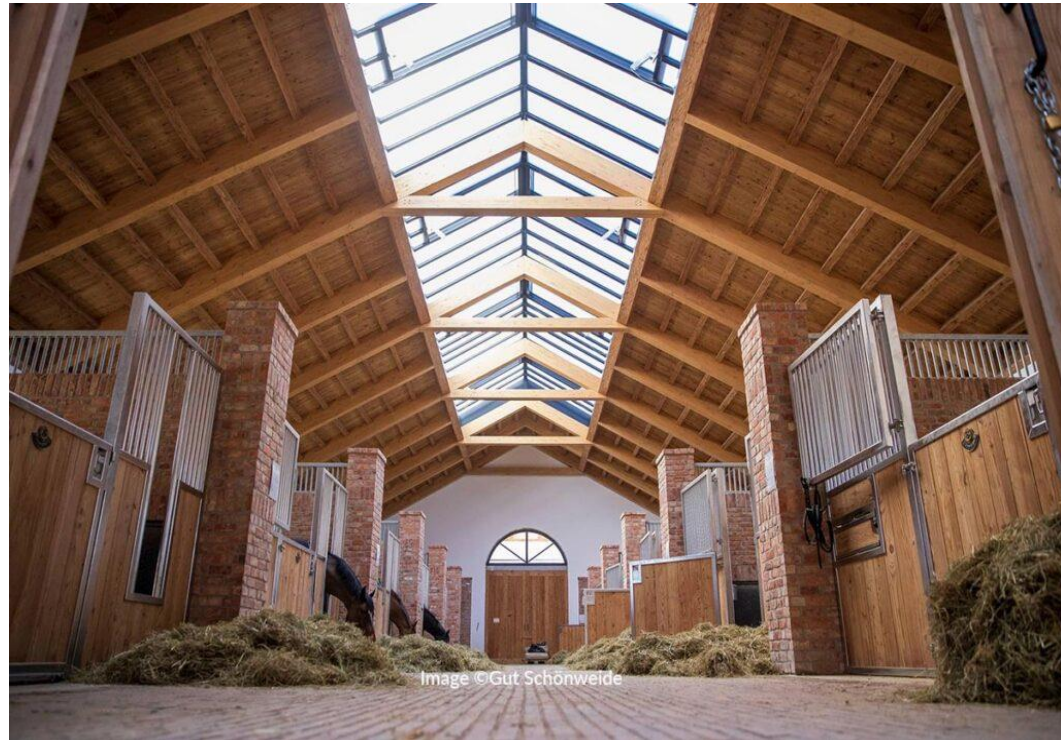




Urban



Feeding bars into the stable corridors



Easier on staff

Eat in natural position

Keeps the hay separate from the bedding

Enjoy foraging in visual contact with the other horses

<https://horsesandpeople.com.au/open-the-gates-horse-welfare/>

Environment Enrichment



Cognitive Stimulation

Enrichment



[Environmental Enrichment for the Horse: The Need to Forage | The IAABC JOURNAL](#)

Ideally,



Field or large paddock

Use of space and group composition

Multiple resources reduces stress

Able to Express Natural Behaviors



Affiliation and Relationships

Resting and Sleeping Areas







[What horses need and natural behaviour | Blue Cross](#)

Open Housing

“with two entrances instead of one”



Kjellberg,Linda, Horse stables in the 21st century : aspects of management, behaviour and health.

<https://publications.slu.se/?file=publ/show&id=119365>



Urban



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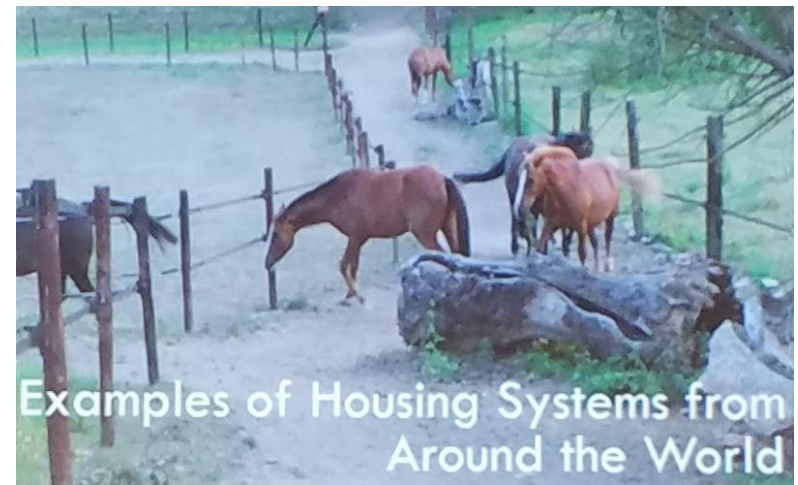
Breeding stallions 'social grids'



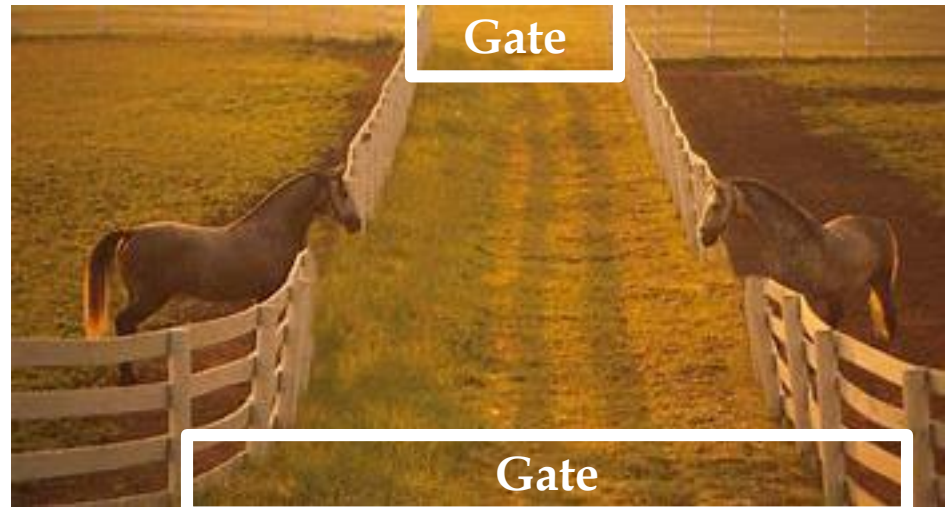
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Circular Trails





Examples of Housing Systems from Around the World

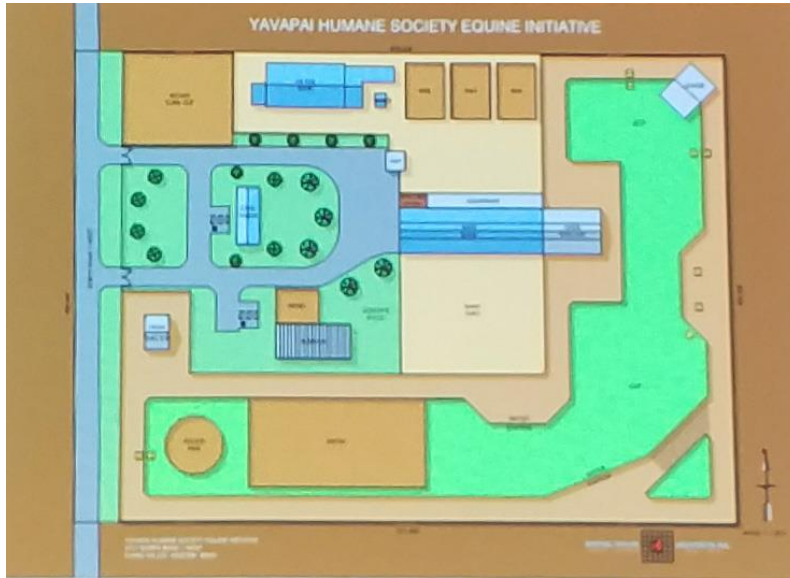


Examples of Housing Systems from Around the World

Buitenkijken
paddock paradise
op 4000 m²

© VivaRanch.be

Yavapai Humane Society



Nina Ekholm Fry
University of Denver
Institute for the Human Animal Connection

- Use of tracks and resource pods to promote movement
- Group housing – 3 separate areas
- Constant access to hay
- Open shelters
- Dedicated resting and rolling areas
- Individual and group quarantine areas for intake
- Intake barn with stalls for medical care and supervision
- Separate hay storage building



Nina Ekholm Fry



Nina Ekholm Fry





Nina Ekholm Fry



Nina Ekholm Fry



Nina Ekholm Fry



Nina Ekholm Fry

Problems?

Co-dependency



Horseshoes
wear down faster

Kjellberg,Linda, Horse stables in the 21st century : aspects of management, behaviour and health.

<https://publications.slu.se/?file=publ/show&id=119365>

[The Stresses of Easy Living - Horse Illustrated](#)

Adaptation



Learned Helplessness



Injuries



Larger the space, the less injuries

Barriers can help reduce conflict

<https://horsesandpeople.com.au/open-the-gates-horse-welfare/>

To Avoid Injury:



- More frequent feeding stations
- Separators for feeding

Hierarchy



Studies Show:



Did not lead to more days lost from training.
No differences in proportion of injured individuals in the active open barn (60%) compared with single boxes (59%)

Kjellberg,Linda, Horse stables in the 21st century : aspects of management, behaviour and health.

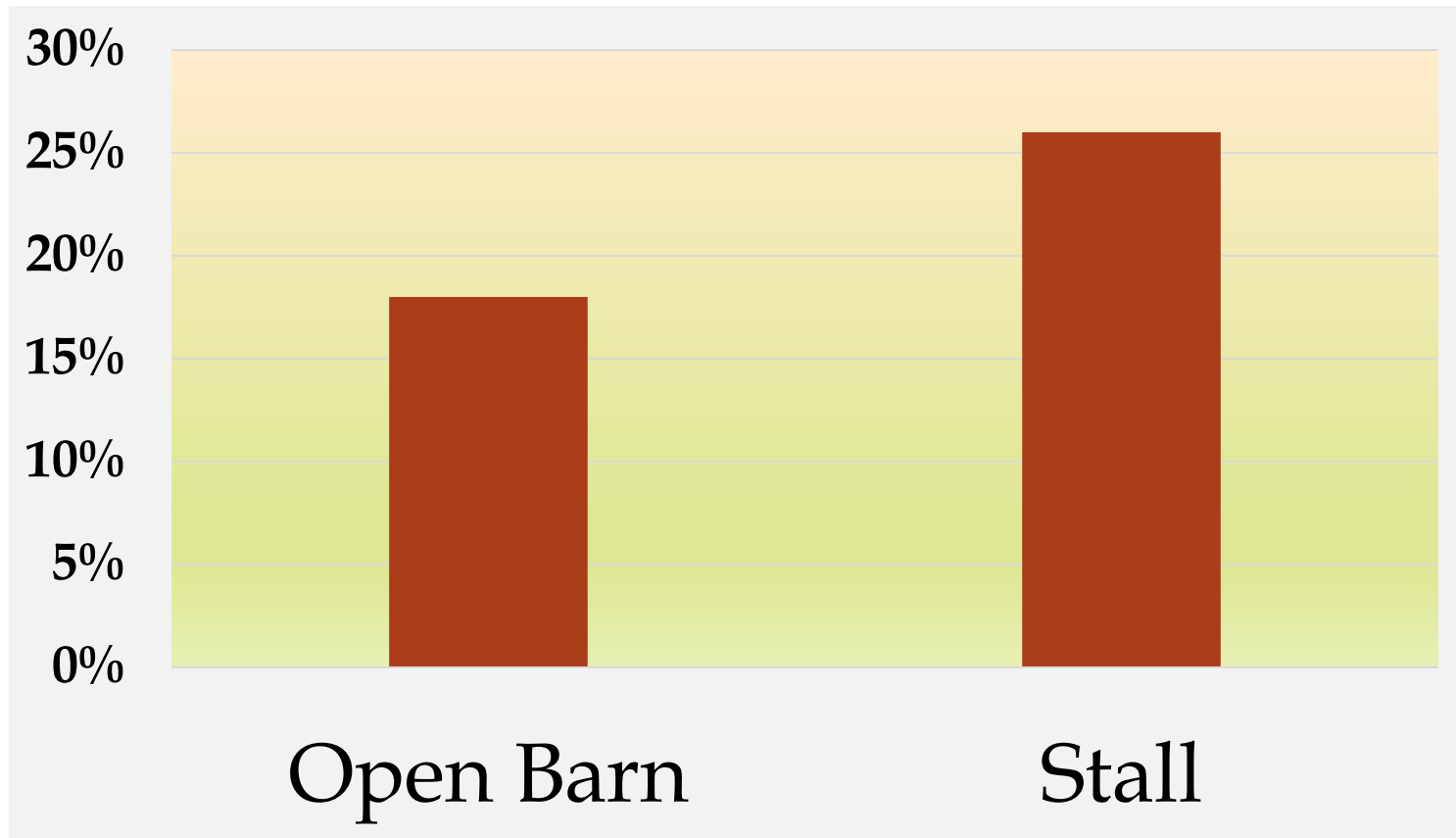
<https://publications.slu.se/?file=publ/show&id=119365>



No differences in behavior between mixed-sex and same-sex herds

Kjellberg,Linda, Horse stables in the 21st century : aspects of management, behaviour and health.

<https://publications.slu.se/?file=publ/show&id=119365>



Reduced incidence of lameness

Kjellberg, Linda, Horse stables in the 21st century : aspects of management, behaviour and health.

<https://publications.slu.se/?file=publ/show&id=119365>

Colic



“The risk for colic increases the more horse stands still, especially if standing without anything to eat,”

Kjellberg,Linda, Horse stables in the 21st century : aspects of management, behaviour and health.

<https://publications.slu.se/?file=publ/show&id=119365>



Stalled Horses

- Intestinal movement lower
- Gut movement slows, greater risk of impaction
- Lower level of exercise
- Decreased colon motility
- Decreased movement of digesta through the gut

Pastured Horses

- Increased intake of fluid through pasture forage
- Movement
- Constant intake of fiber

<https://ker.com/equine/colic-incidence-stalled-horses/>

Fewer Respiratory Problems



MICHIGAN STATE
UNIVERSITY



Young horses housed indoors had increased incidence of airway inflammation when compared to a similar group of young horses at the same farm that were kept out on pasture.

[Health Considerations When Housing Horses \(E3162\) - MSU Extension](#)



Aggressive behavior during feeding decreases
with increasing duration of hay availability

Kjellberg,Linda, Horse stables in the 21st century : aspects
of management, behaviour and health.
<https://publications.slu.se/?file=publ/show&id=119365>

Reduces Working Hours



21 minutes per horse and day

Kjellberg, Linda, Horse stables in the 21st century : aspects of management, behaviour and health.

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Overall Positives for keeping horses in a more natural environment:

- Overall health
- Reduced stress
- Less stereotypes
- Sufficient sleep
- Better behavior when working



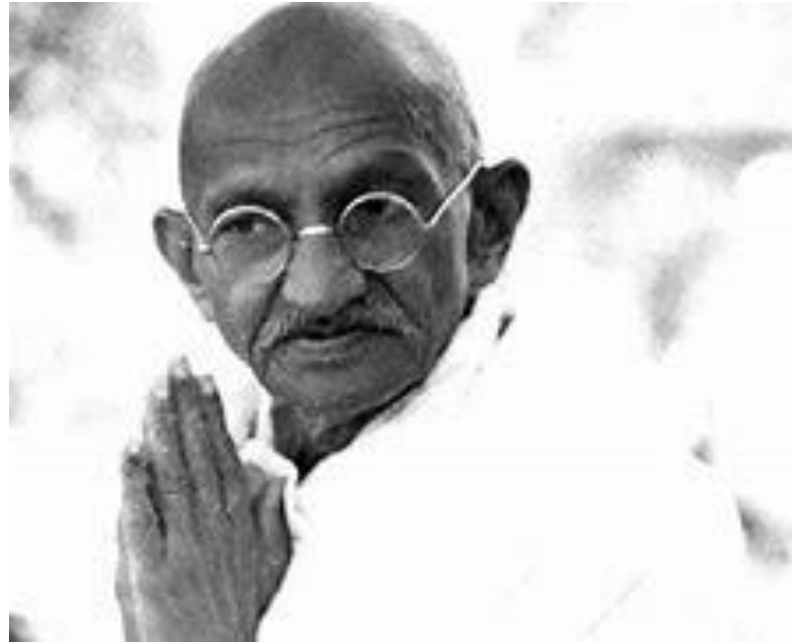
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Home, from a Horse's Perspective



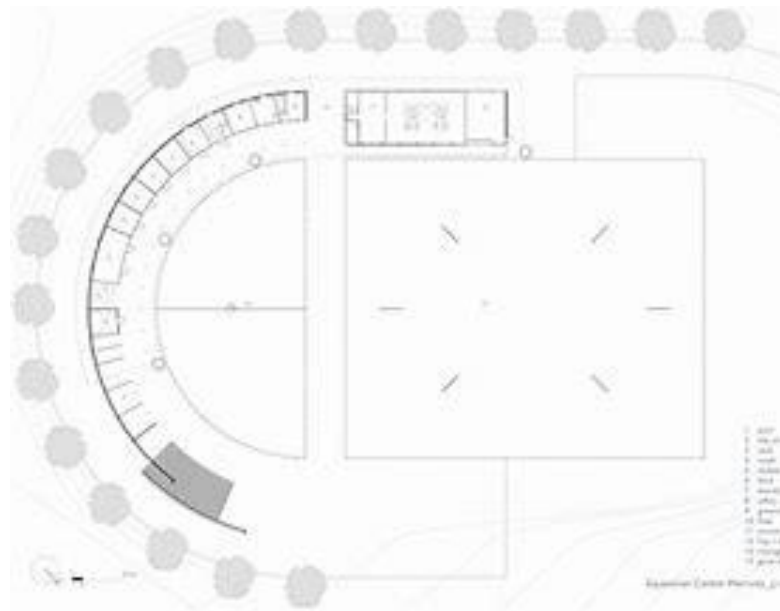
Do you want to live there?



The greatness of a nation and its moral progress can be judged by the way its animals are treated”

Gandhi (1869-1948)

Assignment



Design your stable area to meet the needs of the natural behavior of horses!



SPECIAL THANKS TO:



Jo Anne Miller

executivedirector@brookhillfarm.org