Impact of the Equestrian Industry Facilitate horse enthusiasm – gain vitality and a decent member of society







Facilitate horse enthusiasm – gain vitality and a decent member of society

The horse industry is in the midst of active change. In the digitalizing era, the horse provides physical experiences and emotions. Interaction between horses and humans strengthens emotional and professional skills, self-esteem, and life management. In a recent impact analysis of the Finnish equestrian industry, the impact on the economy, society, and the environment was evaluated using quantifiable indicators and calculations based on the SROI method.

The analysis was composed of expert interviews (5 in total), data collected from customers and other external sources, and conducted by Gaia Consulting. In the future, the positive impact of horses could increase significantly, provided we take care of the prerequisites of the entire industry.











In Finland, there are 160,000 horse riding enthusiasts, of whom 64% are adults and 36% are children and young people. The estimated number of people engaging in harness racing in various ways is around 200,000. There are a total of 5,321 coaching and driving licenses for harness racing in Finland, of which 617 are held by young people.



In Finland, there are about 72,000 horses and 16,000 horse stables. The Finnish Equestrian Federation (SRL) has 132 member stables and 207 members that are riding schools. There are 500 SRL member clubs in Finland. There are approximately 21,709 owners of trotting horses, of whom over 8,000 are horse co-ownerships. The horse industry employs over 15,000 people and produces an estimated 6,500 person-years of work. This is equivalent in magnitude to the employment figure of tourism in Lapland.







The horse industry reduces the risk of social exclusion.

Horseback riding creates a sense of community and provides a physical hobby that reduces the costs associated with social exclusion for society.

There are approximately 160,000 individuals involved in equestrian activities, of which 36% are young people or children. The number of equestrians alone is significant (greater than, for example, the number of tennis players), and when including other forms of horse sports such as harness racing (approximately 200,000 people), the equestrian sector has a wide-ranging impact.

A unique aspect of the horse industry is equine-assisted activities as a form of social rehabilitation, which has been proven to prevent social exclusion. Horse activities provide structure to the lives of individuals at risk of social exclusion, promote social interaction, and contribute to the development of life management skills. The Employment and Economic Development Offices (TE offices) also utilize equine-assisted activities to support young people who face difficulties in employment. Currently, there are approximately 140 service providers in Finland, with around 260 members in the industry association.

Interaction with horses is special because a person's ethnicity, skin color, religion, ideology, or any other characteristic is insignificant. Interaction with horses elicits immediate reactions and communication, and earned trust is the result of long-term work. Horses provide humans with experiences of acceptance and visibility as their authentic selves. Horses do to the communication and earned anyone.







HORSES HAVE AN IMPACT.

For example, due to the equestrian hobby, young people removed from the risk of social exclusion results in lifelong cost savings of **1.6 billion euros**

for the state.



The horse industry supports wellbeing Partaking in a hobby involving horses directly provides benefits of exercise and reduces the

Partaking in a hobby involving horses directly provides benefits of exercise and reduces the societal costs of physical inactivity. Physical inactivity causes significant costs in Finland (at least 3.2 billion euros) annually, including both direct healthcare costs and productivity costs. According to a report by the Finnish government, 75% of the population are physically inactive, meaning that they do not meet the definition of sufficient exercise by the Finnish National Institute for Health and Welfare (UKK Institute). Exercise has been proven to play a key role in preventing the development of common illnesses.

Hobbies that involve horses include a wide range of activities, one of them horse racing. However, due to data availability, for the purposes of this analysis, the focus is on horse riding. Based on a survey by the Finnish Equestrian Federation, it is estimated that about 25% of riders would meet the UKK Institute recommendation of 2.5 hours of moderate exercise per week, simply by participating in horse riding. This would result in cost savings of at least 31 million euros annually due to reduced physical inactivity thanks to horse riding. There is no age-based discrimination involved in hobbies with horses, and enthusiasts come from various age groups – for example, horse racing involves athletes of all ages.

Animal-assisted social or healthcare services (such as equine-assisted therapy, sociopedagogical horse activities, and empowering horse activities) also play a significant role in individual well-being. Animal-assisted therapy has been found to be effective even when other forms of support have not been helpful.







HORSES HAVE AN IMPACT.

For example, the annual cost savings resulting from equestrian hobbies due to reduced physical inactivity amount to **30.8 million euros**



The horse industry creates regional economic impacts

It has been estimated that one horse creates employment for approximately 0.09 fulltime equivalent (FTE) workers. In Finland, there are approximately 72,000 horses, which means that the employment impact is around 6,500 FTEs. This figure is of the same magnitude as the employment impact of tourism in Lapland (8,000–10,000 FTEs).

The costs associated with maintaining a horse (including veterinary care, food, shoeing, and equipment) create indirect regional economic impacts. The cost of maintaining one horse is estimated to amount to approximately 3,800–9,600 euros per year. Based on this estimate, the money flows associated with horse maintenance in Finland total at least 274 million euros per year, excluding stable rent.

Horse industry events can bring significant amounts of income to localities. For example, it has been found that the Kuninkuusravit event brings in 8–15 million euros to the surrounding area, and the Helsinki International Horse Show brings in 10–13 million euros to Helsinki. The 2022 Kuninkuusravit brought in around 10 million euros to the Forssa region.

The number of horses varies by region. The largest absolute regional economic impacts from horse maintenance are found in the Uusimaa and Pirkanmaa regions, while the largest relative impacts (%/GDP) are found in Etelä-Pohjanmaa and Kanta-Häme. The impacts extend widely throughout Finland, affecting all regions.







HORSES HAVE AN IMPACT.

274 million euro impact

to local economies

Horses maintain biodiversity in nature

It has been proven that grazing horses increase biodiversity in nature and help preserve endangered plant species. The effects of the horse industry on biodiversity in Finland are particularly significant in traditional rural biotopes. According to the assessment of endangered Finnish nature types, all traditional environments (including forest pastures, meadows, and fallow land) are threatened by overgrowth. According to the assessment of endangered Finnish species, out of 22,418 evaluated species, 2,667 (11.9%) are endangered. Nearly a quarter of these (651 species) depend on traditional biotopes.

Most traditional rural biotopes are maintained by the grazing of various animal species together (cattle, sheep, horses). Grazing animals take care of the landscape and keep it open. Since a significant portion of Finland's endangered plant and animal species are found in traditional environments, the grazing of horses plays an important role. Although horses account for a small percentage (6%) of grazing animals in traditional rural biotopes, the grazing of horses can help preserve at least 38 endangered species in Finland.

More broadly, the horse industry, and especially harness racing, plays a significant role in preserving the culturally valuable original breed of horse, the Finnish horse. Currently, there are about 20,000 Finnish horses in Finland, and around 1,000 foals are born each year, which is equivalent to one-third of all foals.







HORSES HAVE AN IMPACT.

Grazing horses on traditional biotopes can help preserve at least **38 endangered species**

in Finland.

The horse industry promotes carbon sequestration

The impact of the horse industry on carbon sequestration consists of cultivating feed for horses and the increased ability of soil and vegetation to sequester carbon due to grazing. Grazing can increase the carbon sink in the soil, allowing carbon to be stored permanently in the soil (essential for creating climate effects). Grazing animals act as efficient decomposers, and partially digested manure acts as a carbon sink in the soil. Grazing to promote carbon sequestration is done through rapid rotational grazing. By optimizing the number of horses (considering animal density), the area of grazing land, and the necessary rest and grazing periods, the amount of carbon sequestered due to horse grazing can be significantly influenced. By optimizing these factors and assuming that a maximum of two horses can graze on one hectare, approximately 29,000 tons of carbon could be sequestered annually in Finland by horses grazing in rural areas. According to one study, grassland sequesters an average of 0.64 t C/ha/year. In Finland, horses consume about 182 million kilograms of dry hay per year, which requires a cultivation area of approximately 50,000 hectares. This entire area sequesters about 31,000 tons of carbon per year. This figure is equivalent in significance to the annual carbon footprint of approximately 11,000 average Finns.







HORSES HAVE AN IMPACT.

Cultivation for horse feed captures 31,000 tons of carbon annually. The potential for carbon sequestration through optimal conditions of horse grazing is

29 tons per year.

Goals of the Equestrian Industry



Long-term funding

- Starting from the beginning of 2024, the funding for the horse industry will shift to general budgetary funds. It is extremely important that the continuity and level of funding for several years in the future are ensured through this method as well. The horse industry itself is ready to develop, but political support is needed to complement that.

- The survival of the Finnish horse breed in the future is largely dependent on the success of Finnish harness racing.

- Gambling and harness racing have traditionally been strongly linked to each other from the perspective of industry funding as well. It is essential that the significance of harness racing and the entire horse industry as a livelihood is taken into account when examining changes in the gambling market.



Enabling entrepreneurship and innovation

- The equestrian industry is a significant subsidiary sector in agriculture, but for some farms, it is also the main mode of production. The range of different experiential, tourism, and full-board services has increased in rural areas. The number of rehabilitation and well-being services related to horses has also grown. Sustainable horse industry supports domestic primary production significantly, with nearly 47 million euros of consumption per year.

- The development of the horse industry is based on high-quality domestic breeding. It is essential that horse breeding is seen as an equal and profitable production sector among others.

- Ensuring the welfare of horses requires professionalism and expertise, which is developed through up-to-date and adequately diversified education.



Societal recognition of the significance of the industry

- The horse is a unifier, mover and rehabilitator of both rural and urban areas, an attraction and promoter of nature values and wellbeing.

- The horse has a particularly positive effect on the wellbeing and mental health of children and young people. This is closely related to Natural Resource Institute Finland's policy recommendation on animal-assisted therapy. We especially hope that animal-assisted therapy and other social and health care services will be taken into account in national wellbeing recommendations. This could also result in broader use of service vouchers and payment commitments in wellbeing services counties.





Detailed descriptions of horse industry impact factors

The horse industry reduces the risk of exclusion –

Calculation

Hobbies involving horses create a sense of community and offer a sporty activity that reduces the risk of social exclusion among young people in Finland and the costs to society caused by social exclusion.

Hi22

Impact of hobbies involving horses, such as riding, 🔛 on the risk of social exclusion among young people:					
Young riding enthusiasts who would be at risk of exclusion without a hobby	3,500	р			
Number of young people at risk of social exclusion, involved in riding as a hobby	2,100	р			
Number of young people no longer at risk of social exclusion thanks to riding	1,400	р			
Lifetime costs saved for the government by social exclusion being avoided due to horse riding	1,582,000,000	EUR			



in cost savings

Lifetime cost savings for the government resulting from young people no longer at risk of social exclusion thanks to riding as a hobby





The horse industry reduces the risk of exclusion

- Key findings and assumptions of the analysis

Limitations:

- Due to the availability of data, the analysis is limited to young people and children, as well as people involved in riding as a hobby.
- There is no exact data available on social exclusion for example, the estimated number of marginalised young people in Finland varies between 14,000 and 100,000.
- The definition of young people varies depending on the sources (Hippolis, We Foundation, study by K. Kurppa)
- The years of the data used differ due to the low availability of data.

Assumptions:

- There is no quantified data from public sources on the impact of activities with horses on the reduction of the risk of social exclusion. No quantified data have been found on the effects of hobbies on the prevention of social exclusion, with the exception of one study (K. Kurppa, 2016). This study has been used as the basis for the analysis it is assumed that the risk of social exclusion is reduced by about 40% (9.0% -> 5.4%) due to physical activity.
- It is also assumed in the calculation that the risk of social exclusion among young people involved in riding is the same as in Finland in general.

- If more comprehensive research data on the impact of hobbies on the risk of social exclusion becomes available in the future, the estimate of the impact of riding as a hobby on the risk of social exclusion can be updated.
- If more comprehensive data related to social exclusion can be found for different age groups as well, the analysis can be extended to cover the entire base of horse industry enthusiasts (all age groups) and thus an even greater impact can be calculated. In this case, the analysis could be extended to cover the horse industry more broadly, beyond riding.
- The number of clients within the scope of socio-pedagogical equine activities can be used to interpret the number of people targeted by the







The horse industry supports well-being – Calculation

Activities involving horses significantly reduce the annual costs caused by physical inactivity.



The horse industry supports well-being – Key findings and assumptions of the analysis

Limitations:

· Due to the availability of data, the analysis is limited to people involved in riding as a hobby

Assumptions:

- The analysis assumes that the share of physically inactive people is still 75% in 2021 (as in 2018), since this figure has been used even in the latest articles.
- The assumption is that a person who rides a horse two or more times a week reaches the UKK Institute physical activity recommendation of 2.5 hours of brisk exercise per week.
- The calculation is based on the proportion of riding enthusiasts who can reach the UKK Institute recommendation regarding a sufficient amount of physical exercise <u>only</u> by riding (i.e. other sports activities are not taken into account). Thus, the estimated costs are the minimum amount.

- If the exact number of hours of riding enthusiasts' activity per week is known (and possibly the number of other sports activities), the analysis and the proportion of people who exercise enough can be refined in the future.
- In the future, the analysis can be expanded to cover the horse industry more extensively than just riding, if the availability of data improves, for example regarding harness racing enthusiasts. In this case, the impact of the horse industry on well-being can be described more broadly.







The horse industry creates regional economic impacts –

Results

Regions	Number of horses by region	Maintenance of horses by region, €	GDP by region, €*	Share of horse maintenance Sof GDP by region, %
South Ostrobothnia	4,290	16,300,000	6,655,000,000	0.24%
Kanta-Häme	3,776	14,400,000	6,117,000,000	0.24%
South Savo	2,538	9,700,000	4,442,000,000	0.22%
Central Ostrobothnia	1,363	5,200,000	2,633,000,000	0.20%
North Savo	4,711	17,900,000	8,984,000,000	0.20%
North Karelia	2,773	10,600,000	5,420,000,000	0.20%
Päijät-Häme	3,021	11,500,000	6,809,000,000	0.17%
Central Finland	4,599	17,500,000	9,694,000,000	0.18%
Satakunta	3,517	13,400,000	8,050,000,000	0.17%
Åland Islands	470	1,800,000	1,207,000,000	0.15%
South Karelia	1,853	7,100,000	4,775,000,000	0.15%
Kymenlaakso	2,612	10,000,000	6,835,000,000	0.15%
Kainuu	931	3,500,000	2,503,000,000	0.14%
North Ostrobothnia	4,751	18,100,000	15,166,000,000	0.12%
Pirkanmaa	6,919	26,400,000	21,127,000,000	0.12%
Southwest Finland	5,871	22,400,000	19,250,000,000	0.12%
Ostrobothnia	1,942	7,400,000	7,119,000,000	0.10%
Lapland	1,827	7,000,000	6,900,000,000	0.10% •
Uusimaa	13,433	51,200,000	94,563,000,000	0.05%
No locality listed	589	2,200,000	0	
Total	71,786	273,600,000	238,249,000,000	•



- The horse industry creates regional economic impacts throughout Finland.
- The highest absolute regional economic impacts from horse maintenance are generated in the regions of Uusimaa and Firkanmaa.
- The highest relative regional economic impacts are realised in South Ostrobothnia and Kanta-Häme.





* Statistics Finland's statistics for 2020: Gross domestic product by region

Hi??OS

The horse industry creates regional economic impacts – Key findings and assumptions of the analysis

Limitations:

• The annual estimated costs of horse maintenance include insurance, bedding, shoeing, veterinary expenses, food, deworming and horse brushes. As the purchase costs of the horse and the stable rent are not included, the reported sum of maintenance-related cash flows (€274 M) is the minimum amount.

Assumptions:

- In the calculation of the employment impact of horses, it was assumed that each horse in Finland creates 0.09 person-workyears of employment.
- The calculation also assumes that the maintenance costs of horses are the same for all horses (approx. €3,800, incl. food).
- The distribution of the number of horses by region has been estimated according to the owner's place of residence. It is assumed that the owner's place of residence and the place where the horse is kept are within the same province in most cases.

- If, in the future, data can be obtained on the regional distribution of horses by the places where they are kept, the calculation may produce even more detailed information on the distribution of maintenance-related cash flows at the regional level.
- The analysis can be refined by estimating the costs per horse in more detail, if information becomes available in the future for example on the number of horses per stable.







Horses maintain biodiversity – Results

When grazing on traditional rural biotopes, horses create conditions that help maintain biodiversity and preserve endangered species.



ΜΤΙ



Horses maintain biodiversity

Key findings and assumptions of the analysis

Limitations:

- The classifications of traditional rural biotopes vary from one data source to another. Due to the availability of data, the review had to be limited to five (5) traditional rural biotypes: Dry meadow, Mesic meadow, Freshwater meadow/Shore meadow, Wooded pasture, Grazed woodlands
- The analysis is based on an estimate (previously conducted study) of the number of horses on traditional rural biotopes exact information on the proportion of horses currently grazing on traditional rural biotopes is not available. The estimate has been calculated using the report of the working group on the management of traditional rural landscapes on grazing pressure (per head) for the year 2000.
- The previous study on which this analysis is based has estimated how many domestic animals would be needed to graze on traditional rural biotopes, so the number of horses on farms (15,300) has been used as the number of horses grazing.

- If up-to-date information on the number of grazing horses is obtained (mares that foal and horses aged 1–3 years), the review can be carried out
 again (may be extended to cover non-domestic animals) based on the methodology of the <u>survey</u> used and the Excel calculations of this project
 and the background information listed.
- If accurate data on the proportion of horses among the animals grazing on traditional rural biotopes becomes available in the future, the estimate of horses' impact on maintaining biodiversity and the number of endangered species can be specified.







The horse industry promotes carbon sequestration – Results

The cultivation of feed grown for horses and the grazing of horses enhance the ability of soil and vegetation to sequester carbon.

The impact of horses' grazing on ca sequestration under optimal condit		ential):
Amount of carbon sequestered through optimal grazing (average)	3.75	t C/ha/a
Pasture area required by grazing horses	7,700	ha
Amount of carbon sequestered by hectares of pasture by grazing horses	29,000	t C/year









The horse industry promotes carbon sequestration – Key findings of the analysis

Limitations:

- The exact number of grazing horses is unknown, at the moment, the number of horses in rural areas (15,300) is used in the calculation.
- The impact of grazing on carbon sequestration is based on data from grazing in general, as no horse-specific data were available.
- The amount of carbon sequestration in the pasture area is based on the carbon sequestration potential achieved due to optimal grazing. The average rate of carbon sequestration (3.75 t C/ha/a) is based on the assumption that days of grazing, rest periods and animal density are taken into account and the grazing in question is AMP grazing, where the number of pastures is high and the animals only graze for short periods at a time.
- The average carbon sequestration (3.75 t C/ha/a) is the average of four similar studies. The studies are international, as no data was available from Finland.
- Due to the availability of data, the average carbon sequestration of a hectare of hay field is based on Canadian research.

Assumptions:

- Based on the animal density and the pasture area needed by a horse, the assumption is that a maximum of two horses can graze on one hectare of pasture.
- It is assumed that horses graze 120 days per year.
- It has been assumed that a horse weighs 450 kg on average, and consumes 6.75 kg of feed per day, and every day (excluding grazing horses 120 days a year).

- An update of the calculation is recommended when the exact number of grazing horses is known. This will provide a more accurate estimate of the horse industry's carbon sequestration potential.
- Once more domestic research data on grazing and the average carbon sequestration potential of pasture area becomes available, the calculation can be refined in terms of the carbon sequestration potential of grazing.
- The estimate on the potential of carbon sequestration can also be refined if more horse-specific grazing data becomes available in the future.
 - an externed information is available on the amount of carbon sequestered by a hectare of hay field if accurate data on the average carbon sequestration and the average carbon sequestration of a sequestration of the average carbon sequestration

Sources

- The horse industry reduces the risk of exclusion
- K. Kurppa: Yläasteikäisten nuorten liikuntaharrastukset ja syrjäytyminen
- The Finnish Tennis Association
- Social Pedagogical Equestrian Activity Association (Sosiaalipedagoginen hevostoimintayhdistys ry)
- M. Rönkkö: Sosiaalipedagoginen hevostoiminta lastensuojelun avohuollon tukitoimena
- O. Kangas: Maahanmuuttajilla on Pohjoismaissa iso riski kokea työttömyyttä oppia ongelman ratkaisemiseksi kannattaisi hakea muista maista
- · The horse industry supports well-being
- UKK Institute: Liikkuminen tuo säästöjä
- P. Kolu: Economic burden of low physical activity and high sedentary behaviour in Finland Government's analysis, assessment and research activities: Liikkumattomuuden lasku kasvaa https://www.ratsastus.fi/site/assets/files/2384/terveysprofiili_netti.pdf
- · The horse industry creates regional economic impacts
- Statistics Finland, Gross domestic product per capita by region, annually, 2000–2020: Gross domestic product per capita by region, annually, variables: Region, Year and Data. PxWeb (stat.fi)
- Statistics Finland, Population and society, Population data by region: Population and society | Statistics Finland
- Hippolis, Regions in order of size by the number of horsessuuruusjärjestyksessä hevosmäärän mukaan. Hevosmaarat-maakunnittain-26.3.2021.pdf (hippolis.fi)
- HAMK (Häme University of Applied Sciences), Hevostalous työllistää yhtä paljon kuin Lapin matkailu: Hevosala työllistää yhtä paljon kuin Lapin matkailu HAMK Unlimited
- Costs of children and young people's hobbies Riding: Costs of riding at various levels | VertaaEnsin.fi
- Horses maintain biodiversity
- M. Tälle: Grazing vs. mowing: A meta-analysis of biodiversity benefits for grassland management
- "Paljonko kotieläimiä tarvittaisiin laiduntamaan perinnebiotoopit?"
- Finnish Food Authority: Grazing
- <u>Red Book 2019</u>
- The horse industry promotes carbon sequestration
- The Central Union of Agricultural Producers and Forest Owners (MTK): Carbon farming
- Natural Resources Institute Finland (Luke): Climate measures in the land use sector: Assessment of emissions reduction opportunities
- <u>Carbon Action: Guide for grazing</u>
- Life cycle assessment of alfalfa-grass hay production in Manitoba







Thank you!

Ratsastus.fi Hippos.fi Mtk.fi