Equine Industry Economic Impact Study

2019

HORSE COUNCIL BRITISH COLUMBIA

Ference & Company

ACKNOWLEDGMENTS

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EXECUTIVE SUMMARY

PROJECT BACKGROUND

Horse Council British Columbia (HCBC) is a membership-driven not-for-profit association representing the interests of the equine industry in all sectors throughout British Columbia (BC). Approximately every ten years, HCBC, in partnership with the Ministry of Agriculture, undertakes a detailed survey to estimate the size of the BC horse industry and measure its economic contribution to the provincial economy. With previous studies conducted in 1998 and 2009, 2019 was earmarked as the next obvious interval to update the industry's data and economic impact information. The 2019 HCBC Equine Industry Economic Impact Study is the fifth of its kind. Collectively, the five reports document the economic activities and contribution of the BC horse industry over the last 30 years.

PURPOSE OF STUDY

The purpose of the 2019 Equine Industry Economic Impact Study is to determine the current status of the British Columbian equine industry and calculate its economic benefit and contribution to the provincial economy. The study focuses on the broad scope of all businesses and services in BC, directly and indirectly, relating to the horse industry. Additionally, the study is concerned with comparing the current size of the industry with the size of the industry in both 2009 and 1998. The completed study will update the data and figures for all stakeholders in the equine industry in terms of land use and overall economic impact.

As a result of the study, it is hoped that HCBC will be able to target the services provided to equine enthusiasts and facilitate constructive growth opportunities within the horse industry in BC while informing the government on the operation and impact of the BC's equine industry.

SURVEY RESULTS AND ECONOMIC IMPACT

A province-wide survey targeting those involved in the equine sector formed the basis of the 2019 HCBC Equine Industry Economic Impact Study. A total of 2,502 households completed and returned the survey. To conduct the survey, 12,030 households were contacted directly and thus a 19% response rate was achieved. The unit of analysis for this survey was that of households and not individuals. The 2,502 household responses formed the basis of the final data set used to analyze the survey results. When calculating economic estimates, it was assumed that the distribution of households among sectors was equal to the distribution in 2009. Applying the sector distribution from 2009 to the 2019 survey allows for comparative analysis. An economic multiplier was used in order to calculate the total economic impact of the BC equine industry. The multiplier from the 2009 study was re-employed in the 2019 study for consistency purposes.

KEY ECONOMIC FINDINGS

The main economic findings include:

- **The recreation sector continues to account for the largest share of the provincial equine industry both in terms of horse numbers and economic impact.** In 2019, the race sector was estimated to be the second-largest sector while the sport and the guide/work/ranch sectors have witnessed some comparative contraction since the last study in 2009.

- **There are estimated to be approximately 19,863 households involved in the BC equine industry in 2019.** Of these 19,863 households, 86% own at least one horse with an average of 3.3 horses per owning household.

- **These households are home to approximately 57,580 horses, which have an estimated total capital value of $480 million in 2019.** The average value of a horse varies among equine sectors. Horses in the sport and race sector have reported the highest average value at nearly $16,000 while recreation and guide/work/ranch horses are valued at less than a third of that.

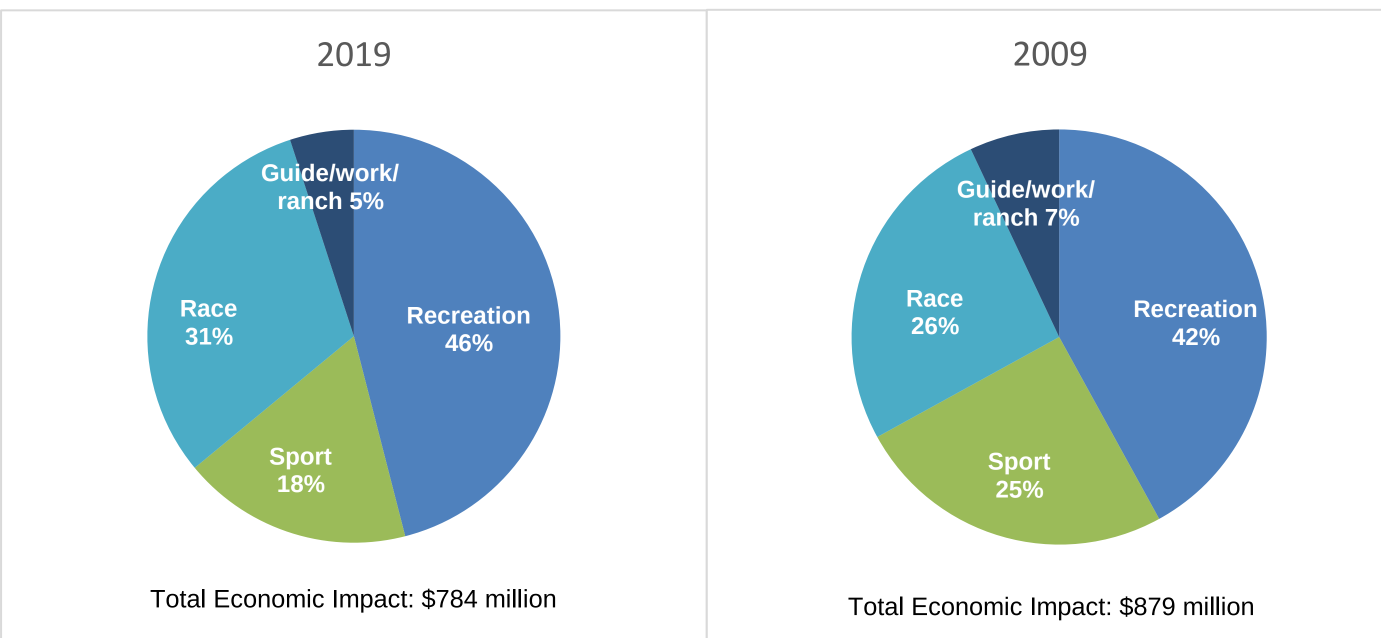
- **Approximately 202,561 BC acres are devoted to keeping horses.** Roughly half of all these acres are devoted to horses categorized in the recreation sector while the race sector has the largest average number of acres per horse property at 51.8 acres per household.

- **There are an estimated 5,620 full-time equivalent (FTE) jobs supported by the BC equine industry in 2019.** Nearly 40% of these jobs are categorized as maintenance of horses, which relates to households hiring outside labour to look after their horses. The other large employment category relates to training horses and riders, which accounts for a third of all FTE jobs supported by the BC equine industry.

- **The number of horses in BC has declined from approximately 95,000 in 2009 to 57,580 horses in 2019.** The recreation sector accounts for the largest share of horses, followed by race.

- **The total economic impact of the BC equine industry in 2019 was calculated to be $784 million.** The recreation sector accounts for 46% of this impact, followed by the race sector at 31% and the sport sector at 18% while the guide/work/ranch sectors amount to 5%. While the distribution of economic impact among the equine sectors remains largely consistent with the 2009 study, the total economic impact of the industry in 2019 is approximately 10% less than its impact in 2009.

Economic impact of the equine industry by sector in 2009 and 2019



Source: HCBC Equine industry Economic Impact Study 2009 and 2019

- **Annual direct expenditures by households in the equine sector are estimated to have resulted in $63.7 million in government tax revenue in 2019.**

- **Horse properties report an estimated total value of $1.67 billion for buildings and equipment used to keep horses in 2019.** The recreation sector accounts for the largest share of this value.

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I. INTRODUCTION

A. PROJECT BACKGROUND

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As per previous studies and for analysis purposes, the 2019 report divided the equine industry into five sectors. Throughout this report, the survey results and the economic extrapolation have largely been presented according to these sectors. The sectors are defined as follows:

- Race: horses and owners involved in racing or horses as part of a breeding farm operation producing racehorses;
- Sport: horses and owners involved in the Olympic equestrian sports (jumping, dressage, three-day eventing) and horses and owners involved in rodeo and reining events;
- Ranch/Work: horses used for work on ranches and in forestry;
- Guide: horses involved in guide outfitting businesses; and
- Recreation: all horses not included in the categories above.

The following paragraphs describe the purpose and methodology of this project.

B. PURPOSE OF STUDY

The purpose of the 2019 Equine Industry Economic Impact Study is to determine the current status of British Columbia's equine industry and calculate its economic benefit and contribution to the provincial economy. The study focuses on the broad scope of all businesses and services in BC, directly and indirectly, relating to the horse industry. Additionally, the study is concerned with comparing the current size of the industry with the size of the industry in both 2009 and 1998. The completed study will update the data and figures for all stakeholders in the equine industry in terms of land use and overall economic impact.

As a result of the study, it is hoped that HCBC will be able to target the services provided to equine enthusiasts and facilitate constructive growth opportunities within the horse industry in BC while informing the government on the operation and impact of the BC's equine industry.

C. METHODOLOGY OF STUDY

A province-wide survey targeting those involved in the equine sector formed the basis of the 2019 HCBC Equine Industry Economic Impact Study. The survey was circulated by email, ground mail and online. The study predominately used the HCBC membership list to access those involved in the equine industry. To broaden the reach of the survey, relevant industry associations were contacted and asked to circulate the survey among their membership base and to promote it on their websites and online platforms. A full list of the associations that were contacted can be found in Appendix I as well as an-depth description of the study methodology. The survey achieved a 19% response rate with 2,502 full and accurate returned surveys. The unit of analysis for this survey was that of households and not individuals. Importantly, some information was also reported via 'horse properties' which has been defined as 'properties that housed one or more horses for part or all of the year'. The 2,502 responses were cleaned, coded, collated and analyzed using Microsoft Excel and SPSS. For economic analysis, the distribution of the equine population was taken from the 2009 report as no new figures were available for the 2019 study. Similarly, the economic multiplier used in 2009 was re-employed for the 2019 study for consistency and comparative purposes.

D. REPORT OUTLINE

Chapter II details the technical results from the 2019 survey. The results are largely presented according to the five industry sectors while a selection of survey results have been compared with the results of previous studies. This trend analysis has been embedded throughout the report. Chapter III focuses on the economic extrapolation of the survey results and thus the economic impact of the equine industry provincially. Comparative analysis is also provided in relation to the economic estimates. Appendix I and II outline a detailed methodology and the study limitations while Appendix III includes a copy of the 2019 HCBC survey which was circulated to the equine population.

II. SURVEY RESULTS

A. SECTOR AND GEOGRAPHIC REGION

Three geographic regions in British Columbia account for more than 81% of all survey responses as depicted in Table 1. These regions are Vancouver/South Coast, Vancouver Island and Thompson/Okanagan. Vancouver/South Coast accounts for the largest share of any region, responsible for one-third of all responding households. Vancouver Island has the second largest proportion of respondents, accounting for just less than 30% while Thompson/Okanagan represents one-fifth of respondents. The remaining regions have a small equine representation in the 2019 survey.

Table 1: Analysis of BC equine industry by sector and by geographic region

Geographical region	Recreation		Sport		Race		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Vancouver/South Coast	494	30%	301	39%	15	47%	15	23%	825	33%
Vancouver Island	493	30%	216	28%	2	6%	6	9%	717	29%
Thompson/Okanagan	333	20%	136	18%	9	28%	18	28%	496	20%
Cariboo	140	9%	47	6%	4	13%	14	22%	205	8%
Kootenay	72	4%	28	4%	1	3%	3	5%	104	4%
Bulkley/Omineca	57	3%	22	3%	-	-	4	6%	83	3%
Peace	43	3%	23	3%	1	3%	5	8%	72	3%
Total	1,632	100%	773	100%	32	100%	65	100%	2,502	100%

As shown in Table 2, the breakdown of equine industry by sector is generally consistent across all geographic regions. In all cases, recreation was the most prevalent sector for survey respondents accounting for 65% overall. Sport was the second most reported sector across regions accounting for 31% overall while the race and guide/work/ranch sectors account for 4% of survey respondents.

Table 2: BC geographic regions by equine industry sectors

Sector	Van/South Coast		Vancouver Island		Thompson/ Okanagan		Cariboo		Kootenay		Bulkley/ Omineca		Peace		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
Rec.	494	60%	493	69%	333	67%	140	68%	72	69%	57	69%	43	60%	1,632	65%
Sport	301	36%	216	30%	136	27%	47	23%	28	27%	22	27%	23	32%	773	31%
Race	15	2%	2	0%	9	2%	4	2%	1	1%	-	-	1	1%	32	1%
G/W/R*	15	2%	6	1%	18	4%	14	7%	3	3%	4	5%	5	7%	65	3%
Total	825	100%	717	100%	496	100%	205	100%	104	100%	83	100%	72	100%	2,502	100%

*G/W/R: Guide/work/ranch sectors

B. HORSE OWNERSHIP

About 86% of all respondents indicated that they owned one or more horses (Table 3). The race sector had the highest portion of ownership at 90% while guide/work/ranch had the lowest at 83%. Approximately 11% of respondents indicated that they leased a horse or a portion of a horse. The sport sector reported the largest volume of leasing at 16% while race reported the lowest at 6%. A total of 36% of respondents said they accessed a horse through an equine facility. Again, this was highest in the sport sector at 50% but dropped to just 26% for guide/work/ranch. Twenty-four years is the average length of time individuals have owned a horse for. This rises as high as 31 years in the guide/work/ranch sector. Thirty-two years is the average length of time respondents have been involved with horses for, rising to 40 years in the race sector.

Table 3: Horse ownership and leasing by sector

Horse ownership	Recreation		Sport		Race		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Own one or more horses	1,409	86%	649	85%	28	90%	54	83%	2,140	86%
Lease one or more horses	144	9%	120	16%	2	6%	6	9%	272	11%
Access via equine facility	492	30%	386	50%	14	45%	17	26%	909	36%
Average years of ownership	24		24		27		31.1		24	
Average years of involvement	32		30		40		35		32	

A total of 6,193 horses are owned by the 2019 survey respondents (Table 4). The average value of a horse reported in 2019 was $8,702. There is no significant difference between the number of female horses (49.6%) versus male horses (50.3%). There is, however, a slight difference in the average value of female horses which are valued at 16% less than their male counterparts. There is also a difference in the number of stallions reported when compared to geldings. Geldings are reported nearly 20 times as often as stallions. Additionally, the average value of a stallion is 36% higher than the average value for geldings. Male horses within the sport and race sectors record the highest value across sector and gender.

Table 4: Total number and value of horses reported by those who own a horse

Number of horses	Recreation	Sport	Race	Guide/work /ranch	Total
Total number of horses reported	3,615	1,997	318	263	6,193
Average value of horses	$4,441	$15,926	$15,316	$4,429	$8,702
Total number of female horses reported	1,770	992	190	124	3,076
Average value of female horses	$4,407	$13,952	$12,313	$4,227	$7,966
Total number of male horses* reported	1,845	1,005	128	139	3,117
- Number of stallions	76	43	25	2	146
- Number of geldings	1,631	888	98	118	2,735
Average value of male horses	$4,473	$17,874	$19,775	$4,609	$9,428
- Average value of stallions	$8,103	$21,500	$23,220	$6,750	$14,687
- Average value of geldings	$4,337	$18,234	$19,752	$4,790	$9,421

*The 2019 survey included both stallions and geldings. Not all respondents indicated whether their male horse was a stallion or gelding and thus the number of stallions and gelding combined do not add to the total number of male horses.

Survey respondents reported a large array of breeds when documenting their horse ownership. As seen in Table 5, the most popular breed among responding households was 'quarter horse and quarter horse crossbreeds'. This breed accounted for nearly 30% of all reported horses and is twice that of the next most reported breed, 'Various Warmblood and Crossbreeds' which account for 22% of the sample. The average value of warmblood breeds is the highest among all the breeds reaching nearly $25,000. 'Miniatures and ponies' are the next most reported breed with about one in five households reporting ownership. 'Thoroughbred and crossbreeds', 'Arabian and crossbreeds' and 'American paint crossbreeds' have been reported in similar numbers with 13%, 12% and 11% of households reporting ownership of these breeds, respectively. Thoroughbreds record the highest value among these three breeds at $9,556. The remaining breeds reported by households are all at a frequency of less than 7%. Points of interest include the high value attached to both 'Andalusian breeds' and 'various sport breeds' both yielding average values greater than $20,000.

Table 5: Most frequently reported breeds by horse owners and the average breed value

Horse Breeds	Number of respondents with breed	% of total sample	Number of horses reported	Average among those reporting a breed	% of all horses reported	Total value reported	Average value
Quarter horse and X	803	37%	1,660	2.1	27%	$9,967,217	$6,004
Other various warmblood and X	476	22%	836	1.8	13%	$20,891,955	$24,990
Miniature and ponies	415	19%	802	1.9	13%	$3,224,371	$4,020
Thoroughbred and X	279	13%	477	1.7	8%	$4,558,411	$9,556
Arabian and X	266	12%	401	1.5	6%	$2,254,350	$5,622
American paint and X	231	11%	318	1.4	5%	$1,529,400	$4,809
Draught/Heavy	150	7%	219	1.5	4%	$1,542,700	$7,044
Morgan and X	136	6%	181	1.3	3%	$599,545	$3,312
Appaloosa and X	96	4%	125	1.3	2%	$388,250	$3,106
Appendix and X	87	4%	100	1.1	2%	$367,701	$3,677
Standardbred and X	83	4%	246	3	4%	$1,828,550	$7,433
Canadian and X	75	3%	117	1.6	2%	$665,300	$5,686
Andalusian and X	59	3%	72	1.2	1%	$1,527,200	$21,211
Tennessee walker and X	42	2%	54	1.3	1%	$164,850	$3,052
Various sport horses	48	2%	61	1.3	1%	$1,471,500	$24,211
Grade, unknown mix	91	4%	176	1.9	3%	$462,000	$2,625
Other	192	9%	348	1.8	6%	$2,449,200	$7,038
Total	2,144	100%	6,193	2.9	100%	$53,892,500	$8,702

The '% of total sample' column will not total to 100% as respondents could detail ownership of more than one breed of horse.

When asked if their horses had increased, decreased or stayed the same in value, 70% of respondents answered that the value of their horses had either increased or stayed the same (Table 6). Of those indicating an increase, 82% attributed the increase in value to an increase in training their horse(s) received while 74% of those who stated their horse's value had decreased attributed the decline to old age or retirement of their horse(s).

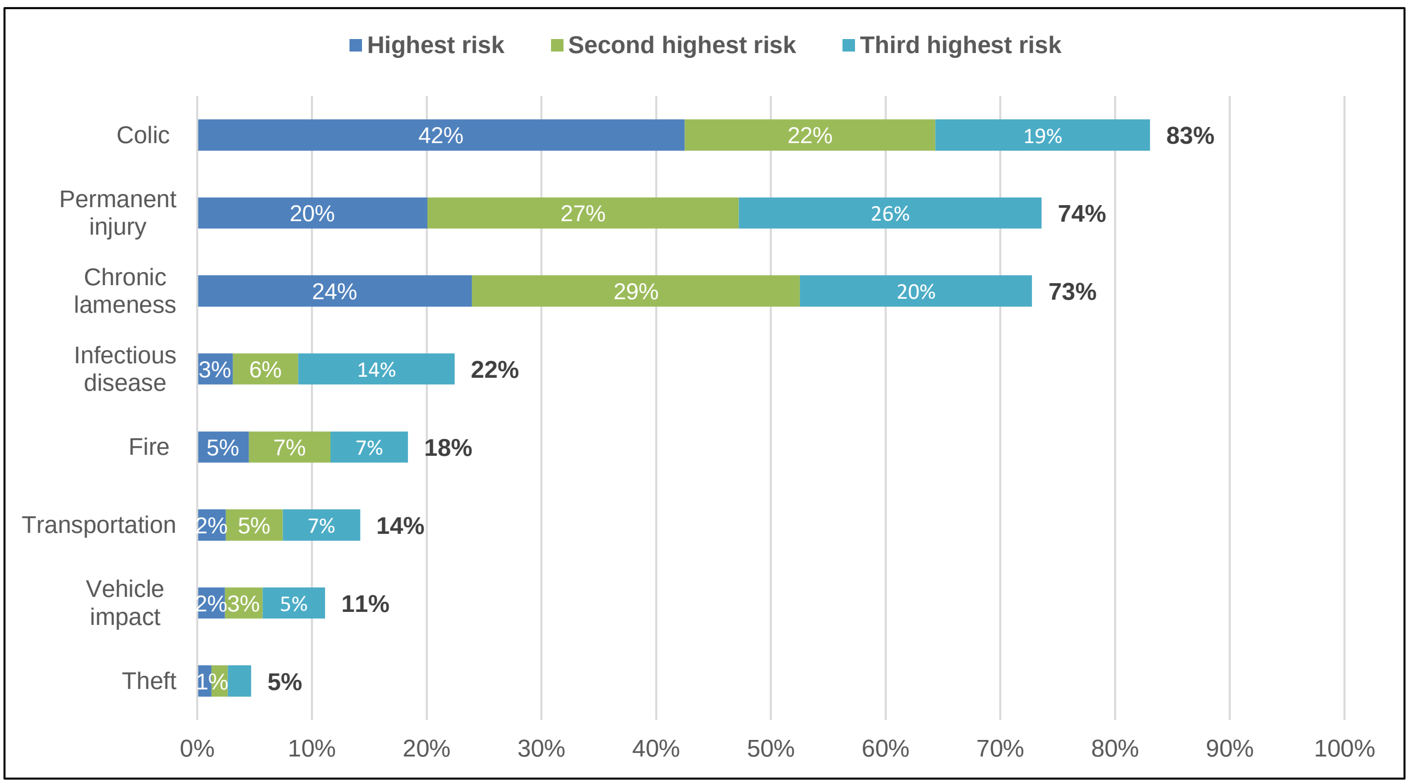
Table 6: Extent to which respondents reported a change in the value of their horse(s)

Value change	Recreation		Sport		Race		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Increase	503	31%	380	49%	12	38%	27	42%	922	37%
Decrease	393	24%	158	20%	6	19%	9	14%	566	23%
Stay the same	601	37%	203	26%	11	34%	22	34%	837	33%
N/A	226	14%	89	12%	4	13%	11	17%	330	13%
Total	1,632	100%	773	100%	32	100%	65	100%	2,502	100%

Percentage totals will not add to 100% as respondents could select multiple responses.

Equine households were asked to rank the risk factors affecting the welfare of their horse(s) from highest to lowest. They were presented with eight predetermined options. As shown in Figure 1, more than 40% of respondents considered 'colic' the number one risk to the health of their horse(s). A further 40% ranked this factor to be the second or third biggest threat. This is consistent with the 2009 study when 'colic' was also ranked as the top risk. 'Permanent injury' and 'chronic lameness' were the next highest concerns in 2019 with nearly 75% of respondents ranking these factors in their top three choices. Approximately one in five ranked 'infectious disease' and 'fire' to be the greatest risk factors. 'Fire' is a greater concern in 2019, ranking 5th overall, compared to its ranking of 7th in 2009. The legacy of recent wildfire seasons which were particularly prominent in the summers of 2017 and 2018 likely yielded a higher ranking for fire. 'Theft' and 'vehicle impact' are lower concerns for the surveyed population which again is consistent with previous studies. Of those who provided alternative answers, 'age' and 'wildlife' were the most frequently mentioned concerns.

Figure 1: Ranking of most prevalent risk factors to equine welfare



Source: HCBC Equine industry Economic Impact Study 2019

C. EQUINE ACTIVITIES

Table 7 outlines the leading uses of BC horses. The most popular equine activity is 'recreational riding' as 47% of respondents recorded recreational riding as their most frequent activity while 71% included it within their top five activities. Other popular activities for the industry include 'show hunter/jumper', 'show dressage' and 'riding lessons'. This pattern is reflected similarly in the recreational and sport sectors. For race, however, the distribution of activities doesn't necessarily echo the overall industry. Within the race sector, specific race activities account for 41% of number 1 responses while 'breeding' is the first choice for 31% of respondents. The guide//work/ranch sector also has a different spread of activities with 'working ranch horses' the largest category accounting for nearly 30% of number 1 choices. About 7% of respondents listed 'other' as their number 1 equine activity. Of the individuals who chose 'other', trail/mountain trail riding was the largest activity with working equitation and therapy the next most frequently mentioned activities.

Table 7: Leading uses of horses

	Recreation		Sport		Race		Guide/work ranch		Total	
	% #1	%Top5	% #1	%Top5	% #1	%Top5	% #1	%Top5	% #1	%Top5
Recreational riding	66%	82%	10%	50%	13%	27%	19%	55%	47%	71%
Show hunter/jumper	2%	9%	26%	46%	-	6%	2%	8%	9%	20%
Show dressage	3%	13%	22%	46%	3%	13%	2%	5%	7%	23%
Riding lessons only	7%	21%	8%	21%	-	6%	3%	11%	7%	20%
Show eventing	1%	5%	9%	17%	3%	6%	2%	8%	3%	9%
Driving	3%	9%	1%	3%	-	3%	5%	11%	2%	7%
Breeding	1%	6%	3%	9%	31%	50%	2%	6%	2%	7%
Show general performance	1%	7%	2%	6%	-	9%	3%	3%	2%	7%
Barrels	1%	4%	4%	9%	6%	9%	2%	12%	2%	6%
Lesson string	1%	3%	3%	8%	-	6%	-	11%	2%	5%
Show western	1%	7%	1%	5%	3%	9%	2%	5%	1%	6%
Working ranch horses	0%	4%	0%	3%	-	9%	28%	46%	1%	5%
Rodeo	0%	2%	3%	6%	-	3%	2%	9%	1%	3%
Reining	1%	3%	2%	4%	-	-	-	2%	1%	3%
Roping	1%	2%	1%	5%	-	6%	8%	19%	1%	3%
Commercial carriage driving	0%	0%	-	-	-	-	2%	3%	1%	0%
Endurance	1%	4%	1%	1%		6%	-	2%	1%	3%
Cutting	0%	2%	1%	4%	-	-	5%	14%	1%	3%
Penning	1%	3%	1%	3%	-	6%	3%	9%	1%	3%
Race - Thoroughbred	0%	1%	1%	1%	25%	41%	-	3%	1%	1%
Guest ranch trail horses	0%	3%	0%	1%	-	-	5%	11%	0%	2%
Race - Standardbred	0%	1%	0%	0%	13%	31%	2%	3%	0%	1%
Competitive trail riding	0%	5%	-	1%	-	-	-	5%	0%	4%
Fox hunt	0%	1%	0%	2%	3%	3%	-	-	0%	1%
Logging	-	0%	-	0%	-	-	-	3%	-	0%
Race – other	-	0%	0%	0%	3%	6%	-	3%	-	1%
Other	8%	15%	4%	8%	-	3%	9 %	15%	7%	12%

About 86% of respondents indicated that they ride for pleasure (Table 8). The recreation sector reports the highest rate of pleasure riding at 91%. The race sector has the lowest rate at 59%. Despite a low rate, those that do pleasure ride within the race sector do so for an average of 140 days a year which is the highest number across any sector. The average number of pleasure riding days across the industry is 126 days. Riding in a 'ring/arena' for pleasure riding is the most popular location for this activity with 69% of households reporting riding in this kind of facility.

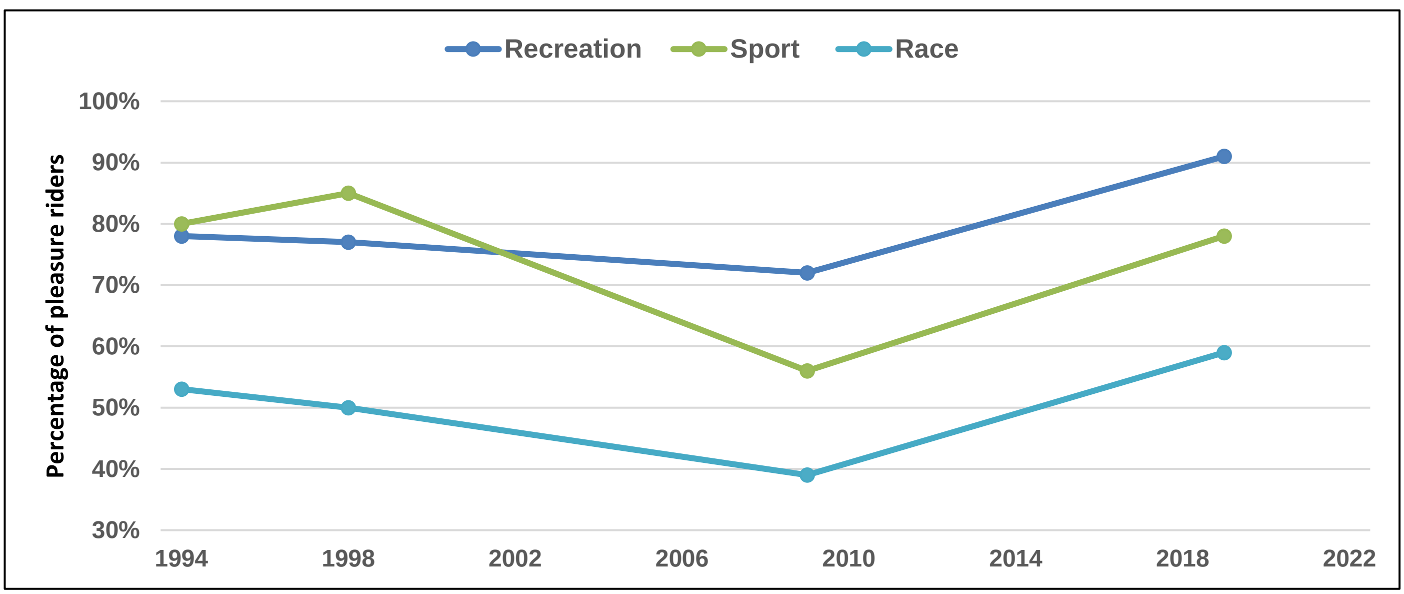
Table 8: Share of the surveyed population who pleasure ride and where they pleasure ride

Pleasure riding	Recreation		Sport		Race		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Those that pleasure ride	1,476	91%	600	78%	19	59%	59	90%	2,154	86%
# of pleasure days per year	121 Days		139 Days		140 Days		97 Days		126 Days	
Locations for pleasure riding										
Those that ride in ring/arena	1129	69%	552	71%	14	44%	42	65%	1,737	69%
Those that ride on public land	960	59%	296	38%	9	28%	41	63%	1,306	52%
Those that ride on private land	887	54%	320	41%	14	44%	44	68%	1,265	51%
Those that ride on designated equestrian trails	864	53%	306	40%	9	28%	22	34%	1,201	48%
Those that ride on roads	834	51%	267	35%	6	19%	25	38%	1,132	45%
Other	38	2%	7	1%	-	-	3	5%	48	2%
Total	1,632	100%	773	100%	32	100%	65	100%	2,502	100%

Percentage totals will not add to 100% as respondents could select multiple responses.

Figure 2 shows an increase in pleasure riding across the three main equine sectors when compared to 2009 figures. The 2009 responses were the lowest in 25 years. It is possible that the harsh economic climate of 2008-2009 played a role in reduced numbers for pleasure riding. The 2019 survey results represent the highest figures for pleasure riding since reporting began.

Figure 2: Trend in pleasure riding by sector 1994-2019



Source: HCBC Equine industry Economic Impact Study 2009 and 2019

The following table (Table 9) looks at the households that report attending one or more events or races in the last three years. Approximately 46% of the surveyed population have attended one or more events in this time frame. The average number of events attended by these respondents across the last three years was 6.5 with approximately half of these events offering prize money. The largest variance in these figures is in relation to money earned at these events. In 2016, the average amount earned was $752, while the average in 2018 jumped to $1,179. The average number of kilometres travelled to attend these events remains largely consistent.

Table 9: Average number of events attended by survey respondents and associated event factors

	# attending 1 or more events/races	% of total sample	Average number of events	# offering prize money	Total money earned	Average distance travelled
2016	1,083	43%	6.6	3.27	$752	1,335 km
2017	1,107	44%	6.6	3.14	$1,070	1,506 km
2018	1,158	46%	6.5	3.48	$1,179	1,357 km

Survey respondents were asked if they were involved in a variety of commercial operations associated with the equine industry (i.e. 15 operations listed in Table 10 below). The major finding from this table is that 84% of respondents don't operate any of the commercial operations. Across the sectors, the recreation sector reports the least involvement in these operations with 89%. The race sector is most active with only 44% of households reporting inactivity across the operations. 'Breeding farms' was reported as the activity most frequently in operation while 'hay producer' and 'training stable – race' are the next most-cited operations. The recreation, sport and guide/work/ranch sectors largely reflect industry averages.

Table 10: Share of households who operate the following equine services

Equine operations	Recreation		Sport		Race		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Hay producer	78	5%	39	5%	6	19%	9	14%	132	5%
Commercial boarding	40	2%	56	7%	5	16%	2	3%	103	4%
Lesson barn	33	2%	63	8%	3	9%	4	6%	103	4%
Breeding Farm	35	2%	45	6%	12	38%	1	2%	93	4%
Training stable sport	6	0%	44	6%	1	3%	3	5%	54	2%
Barn sales	8	0%	17	2%	-	-	-	-	25	1%
Therapeutic Riding Facility	15	1%	6	1%	1	3%	1	2%	23	1%
Equine Rescue	12	1%	5	1%	-	-	2	3%	19	1%
Bed & Bale	9	1%	9	1%	-	-	1	2%	19	1%
Tack Store	8	0%	8	1%	-	-	-		16	1%
Guest Ranch	5	0%	3	0%	-	-	3	5%	11	0%
Commercial Hauling Company	4	0%	2	0%	2	6%	1	2%	9	0%
Equine Veterinary Clinic	4	0%	3	0%	-	-	1	2%	8	0%
Feed store	6	0%	1	0%	1	3%	-	-	8	0%
Training Stable Race	-	-	1	0%	6	19%	-	-	7	0%
None of the above	1,448	89%	606	78%	14	44%	46	71%	2,114	84%

Total	1,632	100%	773	100%	32	100%	65	100%	2,502	100%

As shown in Table 11, three-quarters of households indicated that travelling out of BC for equine activities does not apply to them. For the remaining respondents, households mostly travel out of province for competition purposes with 16% reporting this to be the case. The next most commonly cited options were ‘recreation’ and ‘training’ both accounting for 6% of responses. ‘Breeding’ and ‘boarding’ comprise 3% of responses.

Table 11: Extent to which participants leave BC for various equine activities

Out of province activities	Recreation		Sport		Race		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Competition	110	7%	255	33%	11	34%	17	26%	393	16%
Recreation	122	7%	29	4%	-	-	8	12%	159	6%
Training	68	4%	73	9%	6	19%	2	3%	149	6%
Breeding	15	1%	21	3%	12	38%	1	2%	49	2%
Boarding	10	1%	17	2%	4	13%	1	2%	32	1%
Other	36	2%	26	3%	6	19%	3	5%	71	3%
N/A	1,378	84%	479	62%	9	28%	41	63%	1,907	76%
Total	1,632	100%	773	100%	32	100%	65	100%	2,502	100%

For those that do leave the province, Alberta is the most common destination with nearly two-thirds of respondents reporting they visit the neighbouring province while one-third of respondents visit the US (Table 12). Washington State is the next most popular destination with one-quarter of BC households visiting the US state. Those in the race sector appear to visit Washington less than those in the other sectors. California and Oregon are also popular destinations across the industry. One in four in the race sector travel to other Canadian provinces for equine purposes.

Table 12: Top out-of-province locations respondents visit for equine activities

Out of province locations	Recreation		Sport		Race		Guide/Work/ Ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Alberta	153	62%	185	67%	14	70%	15	68%	367	65%
USA	77	31%	93	34%	9	45%	6	27%	185	33%
Washington State	58	24%	75	27%	2	10%	4	18%	139	25%
California	14	6%	63	23%	2	10%	-	-	79	14%
Oregon	21	9%	26	9%	-	-	2	9%	49	9%
Rest of Canada	14	6%	12	4%	5	25%	2	9%	33	6%
Rest of World	7	3%	4	1%	-	-	1	5%	12	2%
Total	245	100%	275	100%	20	100%	22	100%	562	100%

D. BREEDING

With only 9% of respondents indicating a positive response to breeding activity, breeding accounts for a small portion of total survey respondents. It is worth noting that within the racing sector, 69% of respondents reported some breeding activity. The other sectors remain in line with the industry average. The race sector reports nearly twice as many broodmares as the other sectors with the average value of a broodmare within the race sector twice the industry average. All sectors report a similar number of stallions. The average value of stallions, however, is approximately 25% higher than the average value of broodmares. The sport sector signalled the highest value for their stallions at nearly twice the industry average. The average value of young stock is slightly higher than that of broodmares at $26,700. The race sector reports the highest production of foals per year at 2.8 per household while recreation and sport are at 1.8. The annual sale of young stock largely echoes the production of foals. For example, the industry average for the number of foals produced is 1.9 while the industry average for the number of yearlings sold is 2. This breeding activity is presented below in Table 13.

Table 13: Share of survey respondents involved in breeding and the average value of broodmares, stallions and young stock

Breeding activity	Recreation	Sport	Race	Guide/work/ ranch	Total
% of respondents breeding	6%	13%	69%	9%	9%
Average number of broodmares	2.5	2.7	4.6	2.1	2.8
Average value of broodmares	$13,700	$32,900	$54,100	$13,000	$26,300
Average number of stallions	1.7	1.4	1.2	1.5	1.5
Average value of stallions	$16,500	$67,400	$21,700	$9,250	$35,500
Average value of young stock	$9,500	$24,100	$99,300	$8,000	$26,700
Average foals produced per year	1.8	1.8	2.8	2.4	1.9
Average young stock sold per year	1.8	2	2.8	2.8	2

A total of 70 responding households signalled that they breed and that they have one or more stallions (Table 14). Of this group, 31 households indicated that an outside mare will breed with their stallion while 39 households did not provide an answer. When households indicated their stallion would breed and provided a figure for number of outside mares bred, the average outside mares bred was 4.8. A significant number who reported that they breed a stallion (56%) did not provide a figure for number of outside mares bred.

Table 14: The number of outside mares that will breed with a household's stallion in a season

Outside mares breeding with stallions	Total
Households that breed	219
Those that breed and have 1 or more stallions	70
Those indicating an outside mare will breed	31
Those not providing a figure for outside mares used	39
Average among those answering 1 or more mares	4.8

Again, 70 households reported that they breed and that they have one or more stallions. Within this small group, 44 households reported stud fees totalling $47,750 while the average was $1,085. A total of 19 households reported the value of semen adding to $46,800 in total with an average value of $2,600 (Table 15).

Table 15: Average reported stud fee and the average reported value of semen

Value of stud fee and semen	Total
Those that breed and have 1 or more stallions	70
Those reporting stud fees	44
- Total stud fees	$47,750
- Average stud fees	$1,085
Those reporting value of semen	19
- Total value of semen	$46,800
- Average value of semen	$2,600

As shown in Table 16, of the households that breed, most did not report the provision of ‘live cover’, ‘fresh semen’ or ‘frozen semen’. Most households (74%) indicated that this question did not apply to them. ‘Live cover’ was reported by 20% of those that answered while ‘fresh and frozen semen’ account for 6% each. Similarly, most households do not provide ‘on-farm artificial insemination’, ‘ship locally’, ‘out-of-province’ or ‘internationally’. Of those that did, the most popular option was to ‘ship locally’ which accounts for 10% of responses.

Table 16: Degree to which breeding households provide the following services

Provision of breeding services	Recreation		Sport		Race		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Live cover	20	23%	11	13%	7	39%	1	17%	39	20%
Fresh semen	7	8%	3	4%	2	11%	0	0%	12	6%
Frozen semen	2	2%	8	10%	1	6%	0	0%	11	6%
AI on farm	4	5%	2	2%	3	16%	0	0%	9	5%
Ship locally	6	7%	8	9%	5	26%	0	0%	19	10%
Ship out-of-province	6	7%	6	7%	4	21%	0	0%	16	8%
Ship internationally	6	7%	3	3%	3	16%	0	0%	12	6%

Approximately 64% of breeding households stated their breeding activity has increased or stayed the same over the past five years, as displayed in Table 17. While about a third didn’t report a reason for any change in their breeding activity, the most common reasons cited for an increase was that respondents ‘recently began breeding and thus a natural increase in activity’ (17%) followed by the ‘acquisition of new horses’ (12%). The most common reasons for a decline in breeding were ‘cost’ accounting for 27% of households, ‘market conditions’ responsible for 24% and ‘ageing demographics’ at 17%.

Table 17: Extent to which participants reported a change in their breeding activity in the last five years

Change in breeding activity	Recreation		Sport		Race		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Increase	31	34%	34	34%	7	32%	3	50%	75	35%
Decrease	34	37%	41	41%	8	36%	-	-	83	38%
Stay the same	27	29%	26	26%	7	32%	3	50%	63	29%
Total	92	100%	97	100%	22	100%	6	100%	217	100%

Totals will not add to 100% as respondents could select multiple responses.

E. BOARDING

In terms of equine boarding, survey respondents can largely be split into two main groups: 1) those who always board their horses out, accounting for 39% of households and 2) those who never board their horses out, accounting for 48% of households. Together these two groups account for 87% of responses. Table 18 shows that households rarely board their horses for part of the year. If they do, the most frequently mentioned timeframe is for 1-2 months followed by 3-4 months. Sport horses see the highest rate of boarding at 48% while guide/work/ranch horses see the lowest rate of boarding at 12%.

Table 18: Share of participants boarding their horse out throughout the year

Frequency of boarding	Recreation		Sport		Race		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Always - *(12 months)*	578	35%	371	48%	11	34%	8	12%	968	39%
Very frequently - (8-11 months)	12	1%	12	2%	1	3%	2	3%	27	1%
Frequently - (5-8 months)	27	2%	21	3%	5	16%	1	2%	54	2%
Occasionally - (3-4 months)	50	3%	37	5%	3	9%	1	2%	91	4%
Rarely - (1-2 months)	83	5%	57	7%	4	13%	6	9%	150	6%
No, never	874	54%	274	35%	8	25%	47	72%	1,203	48%
N/A	8	1%	1	0%	-	-		-	9	0%
Total	1,632	100%	773	100%	32	100%	65	100%	2,502	100%

As shown in Table 19, average boarding expenses per month range from $640 to $1,061 depending on the boarding program and in which sector the horse is classified. The race sector reports the most expensive fees across full board and pasture board while sport has the highest fees for self-board and semi-board. The race sector reports the highest spend for 'board and training race' while the sport sector records the largest expenditure for 'board and training and sport'.

Table 19: Average spend per month on various boarding services

Average boarding spend p/m	Recreation	Sport	Race	Guide/work/ ranch	Total
Full board	$558	$749	$933	$410	$640
Pasture board	$203	$291	$375	$260	$236
Self-board	$228	$284	$186	$175	$244
Semi-board	$313	$377	$0	$125	$330
Board & Training Race	$255	$281	$1,655	$0	$687
Board & Training Sport	$793	$1,249	$1,200	$600	$1,061

As indicated in Table 20, 51% of respondents reported that they keep their horses at home at some point during the year while 37% said that they did not. About 12% of respondents deemed this question did not apply to them. This percentage is consistent with the 11% of respondents who indicated that they do not own a horse (table 3). Guide/work/ranch horses are most likely to be kept at home while sport horses are least likely to be kept at home at any point throughout the year.

Table 20: Degree to which equine households keep their horses at home during the year

Keeping horses at home	Recreation		Sport		Race		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Yes	870	53%	330	43%	22	69%	48	74%	1,270	51%
No	571	35%	349	45%	8	25%	7	11%	935	37%
N/A	191	12%	94	12%	2	6%	10	15%	297	12%
Total	1,632	100%	773	100%	32	100%	65	100%	2,502	100%

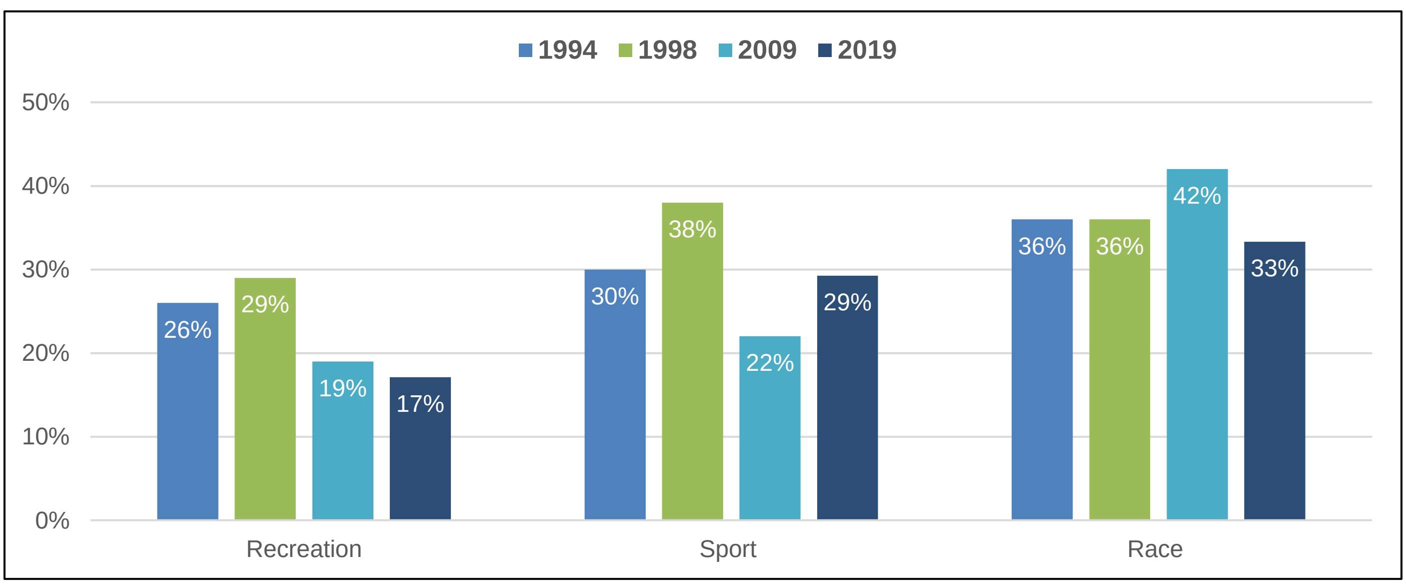
Table 21 depicts that 20% of horse properties report boarding other people's horses on their property. The race and sport sector report the highest rate of boarding other people's horses while those in the recreation and guide/work/ranch sector report averages below the industry level. On average, households board 3.7 horses on their farms. The average for the race and guide/work/ranch sector is 5.5 while it is 2.8 for the recreation sector. For 40% of households, boarding represents more than half the gross earnings from their equine operations. This is roughly consistent across the four sectors of the industry.

Table 21: Share of horse property respondents that offer on-farm boarding

On-farm Boarding	Recreation		Sport		Race		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Horse properties that board other horse	152	17%	93	29%	6	33%	7	15%	258	20%
Average number boarded on farm	2.8		5.1		5.5		5.6		3.7	

Figure 3 tracks the change in horse properties that report boarding horses. The number of horse properties boarding horses has decreased in the recreation and race sectors in the last decade with a 2% and 9% decline, respectively, while the sport sector has reported a 7% increase.

Figure 3: Horse properties that reported boarding horses



Source: HCBC Equine industry Economic Impact Study 2009 and 2019

F. COACHING

As outlined in Table 22, 12% of respondents reported that they are involved in coaching. Of those that coach, 45% are certified. The highest frequency of certification is within the race and sport sectors. For nearly one-quarter of the coaching population, coaching is their primary source of income. Roughly 40% of coaches teach out of their own facility while a similar number have access to school horses. The average number of school horses that coaches have access to is 3.6 horses. Whether coaches teach in an indoor arena varies depending on the sector. One third of sport coaches are likely to coach indoors but only 7% of guide/work/ranch coaches are. On average, those who coach do so for 12.5 hours per week. However, this varies as those in race report an average of 27 hours per week whereas those in guide/work/ranch report an average of 6 hours. Finally, 50% of responding coaches report that they travel to coach.

Table 22: Survey respondents who coach and their associated coaching environment

Coaching and training	Rec.		Sport		Race*		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Those who coach/train	129	8%	149	19%	8	25%	15	23%	301	12%
Of those that coach, those that are certified/licenced	50	39%	81	54%	5	63%	-	-	136	45%
Those for which coaching is their primary income	21	16%	47	32%	4	50%	-	-	72	24%
Those who teach out of their own facility	49	38%	66	44%	2	25%	7	47%	124	41%
Those who have access to school horses	53	41%	51	34%	3	38%	6	40%	113	38%
Average number of school horses they have access to	3.4		3.6		8		3.8		3.6	
Those who coach in an indoor arena	25	19%	50	33%	1	13%	1	7%	77	26%
Average number of coaching hours	9		15		27		6		12.5	
Those who travel to coach	56	43%	86	58%	3	38%	4	27%	149	50%

*Only a small number of respondents provided an answer to this question. Interpret with caution.

For more than 60% of households, reputation is the single most important factor when selecting a riding instructor (Table 23). Certification and location are the next most cited factors with 11% of households prioritizing each of these aspects. Certification is most important to those in the recreation and sport sectors. Competition results are most important to those in the race sector.

Table 23: Factors influencing the choice of riding instructor

Selection criteria for instructor	Recreation		Sport		Race		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Reputation	985	60%	503	65%	16	50%	33	51%	1,537	61%
Certified	171	10%	108	14%	1	3%	2	3%	282	11%
Location	196	12%	59	8%	2	6%	6	9%	263	11%
Competition results	19	1%	39	5%	1	3%	1	2%	60	2%
Training	32	2%	14	2%	-	-	1	2%	47	2%
Other	75	5%	30	4%	1	3%	5	8%	111	4%
N/A	153	9%	20	3%	11	34%	17	26%	201	8%
Total	1,631	100%	773	100%	32	100%	65	100%	2,501	100%

G. PURCHASING

Survey participants were asked 'When buying a horse, where do you first start looking?' As Table 24 shows, 64% of respondents indicated that they first look online. Other popular options include consulting their horse trainers/coaches (40%) or their industry contacts (33%). For approximately 12% of respondents, this question was not applicable which corresponds to Table 3 in which 11% of respondents say they do not own a horse.

Table 24: Most common channels respondents use when first looking to purchase a horse

Purchasing channels	Recreation		Sport		Race		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Online/web	1,038	64%	513	66%	16	50%	38	58%	1,605	64%
Trainers/coaches	534	33%	443	57%	9	28%	21	32%	1,007	40%
Industry contacts	485	30%	297	38%	16	50%	25	38%	823	33%
Breeder	236	14%	163	21%	13	41%	19	29%	431	17%
Printed equine publications	276	17%	96	12%	6	19%	8	12%	386	15%
Sales barn	57	3%	94	12%	9	28%	7	11%	167	7%
Other	49	3%	19	2%	2	6%	-	-	69	3%
N/A	242	15%	58	8%	5	16%	5	8%	310	12%
Total	1,632	100%	773	100%	32	100%	65	100%	2,502	100%

As indicated in Table 25, 12% of respondents signalled that they have bought a horse from a rescue facility. Purchasing from a rescue facility is generally consistent across the equine sectors. The average spend on rescue horses across the industry is $740. This rises as high as $981 in the sport sector and drops to approximately $544 for the guide/work/ranch sectors. Most respondents indicated that they accessed their horse via a private rescue set-up while some indicated they did so via auction and racetrack.

Table 25: Share of respondents who have purchased from a rescue facility and the average spend

Use of rescue facilities for purchasing	Recreation		Sport		Race		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Access a horse through rescue	225	14%	68	9%	4	12%	9	14%	306	12%
Average spend	$676		$981		$644		$544		$740	

H. FARM MANAGEMENT

The race and guide/work/ranch sectors have the greatest share of households reporting that their land is classified as a farm by the BC farm tax assessment authority at 56% and 46%, respectively, while the industry average is 20% of households (Table 26). Only 5% of those who are classified as bona fide farmers are predominantly an equine business. Again, race reports a higher degree (38%) than the industry average. Developing a business plan is not common practice as only 9% of respondents reported having one. Of those that do have a business plan, most set goals annually. About 14% of respondents filed a farm income tax form in 2018. A higher proportion of those in the race and guide/work/ranch sectors file a farm income tax form.

Table 26: Survey respondent's land classification

Land classification	Recreation		Sport		Race		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Land classified as a farm by BC farm tax assessment authority	290	18%	165	21%	18	56%	30	46%	503	20%
Those classified as a bona fide farmer, based on equine business	46	3%	66	9%	12	38%	7	11%	131	5%
Do you have a farm business plan?	118	7%	84	11%	10	31%	16	25%	228	9%
If yes, do you set annual goals?	89	5%	68	9%	10	31%	14	22%	181	7%
Farm income tax forms filed in 2018	189	12%	129	17%	15	47%	22	34%	355	14%

Table 27 indicates that 18% of responding households produce other agricultural products. When asked to list their other products, 40% said they produced 'hay/forage', 37% mentioned 'poultry' (including eggs), 36% listed 'livestock' and 26% referenced 'fruit and veg'. Proportionally, guide/work/ranch respondents reported producing livestock in higher numbers (68%) when compared to the industry average and lower numbers for fruit & veg (12%). The annual average value of other agricultural products reported was $31,269. The value was significantly higher for the guide/work/ranch sector.

Table 27: Percentage of survey respondents producing other agricultural products and the most common products produced

Other ag. produce	Recreation		Sport		Race		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Those producing other ag. produce	289	18%	133	17%	10	31%	28	43%	460	18%
Most common products										
Hay/forage	102	39%	45	42%	3	33%	10	40%	160	40%
Poultry/eggs	104	40%	36	34%	1	11%	8	32%	149	37%
Livestock	85	32%	41	39%	3	33%	17	68%	146	36%
Fruit & veg	68	26%	31	29%	3	33%	3	12%	105	26%
Other	20	8%	4	4%	1	11%	-	-	25	6%
Total	262	100%	106	100%	9	100%	25	100%	402	100%
Average annual value of other agricultural products										
Average value	$28,558		$22,554		$34,714		$114,845		$31,269	

As shown in Table 28, 20% of respondents indicated that they practiced some form of biosecurity. The most common initiative is to quarantine a herd in some capacity (39%). Immunization is the second most common action with 30% of respondents reporting they immunized their horses. Sanitation and health management (including worming) are other frequently reported protocols with more than one quarter and one-fifth of respondents prioritizing these actions, respectively. Restricted access, limiting cross-contamination and manure management are all activities referenced by approximately 15% of those practicing biosecurity.

Table 28: Share of survey respondents practicing biosecurity and the leading biosecurity protocols

Biosecurity practices	Recreation		Sport		Race		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Those practicing biosecurity	296	18%	187	24%	7	22%	15	23%	505	20%
Leading biosecurity protocols										
Quarantine of herd	76	33%	57	44%	4	67%	3	30%	140	37%
Immunization	71	31%	38	29%	3	50%	3	30%	115	30%
Sanitation of all equipment	53	23%	38	29%	4	67%	3	30%	98	26%
Health management	50	21%	26	20%	-	-	3	30%	79	21%
Restricted access	36	16%	20	15%	3	50%	1	10%	60	16%
No cross-contamination	27	12%	27	21%	-	-	1	10%	55	15%
Manure management	37	16%	8	6%	1	17%	-	-	46	12%
Pasture management	17	7%	5	4%	1	17%	-	-	23	6%
Other	16	7%	9	7%	1	17%	1	10%	27	7%
Total	232	100%	130	100%	6	100%	10	100%	378	100%

Two activities account for 67% of manure disposal methods (Table 29). ‘Spreading manure on one’s fields’ and ‘composting it to use/sell it as fertilizer’ are the main ways households dispose of horse manure. About one third (34%) of respondents reported that this question did not apply to them. The race sector is nearly three times more likely than the industry average to have their horse manure removed by a specialized company. About 29% of respondents said they would be inclined to sell composted manure if it could be included as on-farm income under BC assessment.

Table 29: Most common disposal methods for horse manure

Disposal of manure	Recreation		Sport		Race		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Spread it on your fields	571	35%	225	29%	15	47%	40	62%	851	34%
Compost - use/sell as fertilizer	599	37%	202	26%	9	28%	18	28%	828	33%
Commercial manure removal	99	6%	89	12%	7	22%	1	2%	196	8%
Spread it on neighbour’s fields	69	4%	36	5%	1	3%	1	2%	107	4%
Other	123	8%	45	6%	1	3%	1	2%	170	7%
N/A	500	31%	322	42%	6	19%	17	26%	845	34%
Total	1,632	100%	773	100%	32	100%	65	100%	2,502	100%
Those that would sell composted manure if it could be included as on-farm income under BC Assessment										
Yes	472	29%	223	29%	12	38%	18	28%	725	29%

Table 30 highlights that 16% of respondents have a manure storage area that is protected from the rain. A total of 39% of respondents indicated that the question did not apply to them while the remaining households (45%) signalled that their storage area was not protected from the rain.

Table 30: Survey respondents who have manure storage that is protected from the rain

Manure storage	Recreation		Sport		Race		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
No	782	48%	301	39%	19	59%	33	51%	1,135	45%
N/A	594	36%	344	45%	7	22%	25	38%	970	39%
Yes	256	16%	128	17%	6	19%	7	11%	397	16%
Total	1,632	100%	773	100%	32	100%	65	100%	2,502	100%

'Rotational grazing' and 'chain harrow' are cited as the most common pasture management techniques (Table 31). Nearly half of all households indicated that they engage in 'rotational grazing' while one third noted 'chain harrow' activity. 'Fertilizer application' and 'irrigation' are less popular techniques with approximately 15% of household signalling activity for each of these methods. Pasture management techniques are reported to a higher degree in the guide/work/ranch sector when compared to the industry average particularly in the instance of rotational grazing which is used by 90% of households within this sector. About 10% of responses were listed under 'other' and the most frequently mentioned responses in the 'other' category included 'mowing', 'weed removal' and 'manure management'.

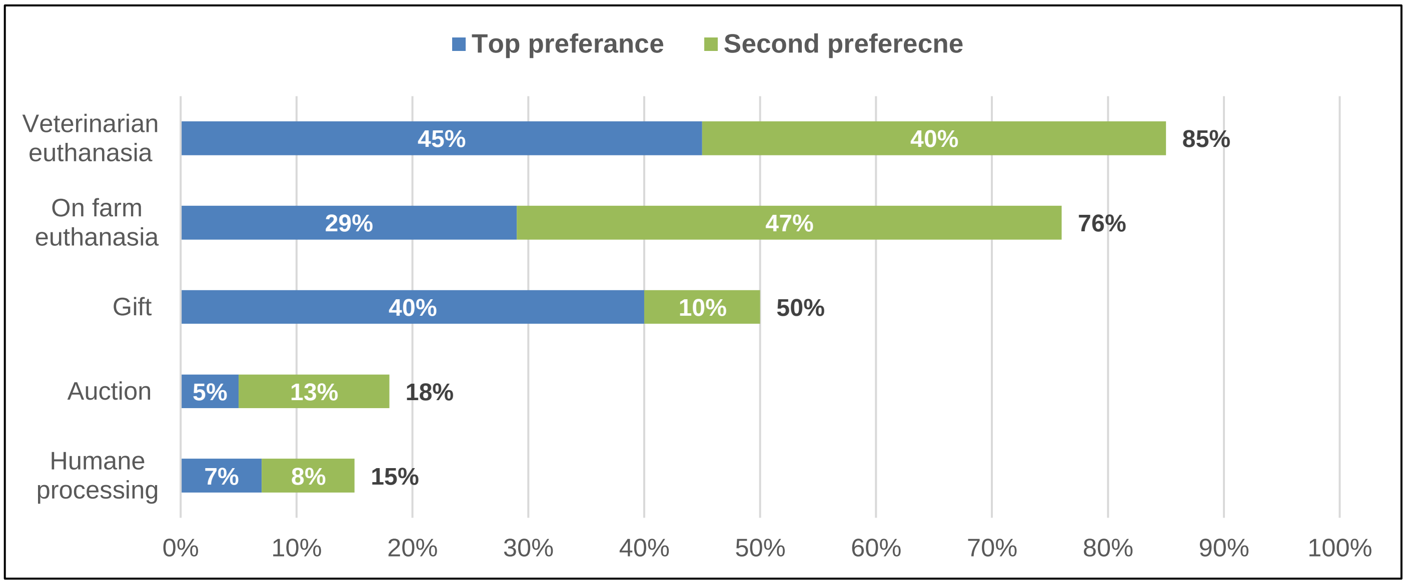
Table 31: Most common pasture management techniques

Pasture management techniques	Recreation		Sport		Race		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Rotational grazing	326	49%	121	38%	10	50%	19	90%	476	47%
Chain harrow	225	34%	95	30%	7	35%	11	52%	338	33%
Fertilizer application	109	16%	54	17%	5	25%	5	24%	173	17%
Irrigation	87	13%	51	16%	3	15%	5	24%	146	14%
Other	71	11%	23	7%	2	10%	2	10%	98	10%
N/A	232	35%	141	44%	4	20%	4	19%	381	37%
Total	661	100%	317	100%	20	100%	21	100%	1,019	100%

I. END OF LIFE

Respondents were asked to consider the most acceptable way to dispose of an infirm, unsound or unwanted horse. The five methods outlined in Figure 4 were presented to survey participants. Respondents were asked to rank these methods from most acceptable to least acceptable. Some households preferred not to answer this question while others simply provided one or two options of disposable. For those that did provide answers to this question, 'veterinarian euthanasia' was considered the most acceptable method of disposable with approximately 45% of households ranking this as the most acceptable method and a further 40% ranking it as the second most acceptable method. This results in 85% of respondents considering this method either the most acceptable or second-most acceptable disposal method. While 'on-farm euthanasia' didn't receive as many number 1 votes as 'gift', overall, more than three quarters of responding households considered it the most or second most acceptable method of equine disposal. 'Gift' captured approximately 50% of all first and second votes while 'auction' and 'humane processing' were not considered by many to be an acceptable method of disposal.

Figure 4: Most acceptable methods of horse disposal for an infirm, unsound or unwanted horse



Source: HCBC Equine industry Economic Impact Study 2019

J. DEMOGRAPHICS

Table 32 details the demographic characteristics of survey respondents. On average, 1.8 household members from equine households are involved in the equine industry. The involvement rate is slightly higher in the race and guide/work/ranch sectors where an average of 2.2 and 2 persons, respectively, are involved in the equine industry. These involvement rates echo similarities from the 2009 study. Female involvement continues to outpace male involvement as it is nearly 2.5 times higher than that of their male counterparts. The gap is smallest within the race sector as 1.3 females are involved compared to an average of 1 male. The gap widens for the sport and recreational sector to approximately three times more females involved. This gender divide has widened slightly when compared to 2009 as female involvement accounted for 68% of the involved population which is lower than 74% in 2019. In total, the 2019 survey respondents indicated that 4,413 members are involved in the industry across the 2,502 household responses.

Table 32: Responding household demographics compared to the provincial average and the 2009 industry average

Respondent demographics	Recreation		Sport		Race		Guide/work/ ranch		Total 2019			BC av.	2009 av.
	Sum	Av.	Sum	Av.	Sum	Av.	Sum	Av.	Sum	Av.		-	Av.
# of involved household members	2,807	1.7	1,402	1.8	73	2.2	131	2	4,413	1.8		-	1.78
# of involved females	2,065	1.3	1,074	1.4	40	1.3	86	1.3	3,265	1.3		-	1.21
# of involved males	757	0.5	335	0.4	33	1.0	47	0.7	1,172	0.5		-	0.57
Age range	**#**	**%**	**#**	**%**	**#**	**%**	**#**	**%**	**#**	**%**		**%**	**%**
<18	471	16%	311	21%	7	9%	27	20%	816	18%		19%	19%
19-35	402	14%	280	19%	13	17%	20	15%	715	16%		22%	17%
36-55	773	27%	471	32%	14	18%	39	30%	1,297	29%		27%	38%
55+	1,229	43%	425	29%	41	55%	46	35%	1,714	38%		31%	27%
Household income*	**#**	**%**	**#**	**%**	**#**	**%**	**#**	**%**	**#**	**%**		**%**	**%**
< $30,000	83	7%	41	7%	1	4%	4	9%	129	7%		19%	10%
$30,000 - $60,000	292	23%	79	13%	3	13%	14	33%	388	20%		24%	26%
$60,001 - $100,000	385	31%	174	28%	7	30%	14	33%	580	30%		25%	33%
$100,000+	493	39%	329	53%	12	52%	11	26%	845	44%		32%	31%
Vehicle ownership	**#**	**%**	**#**	**%**	**#**	**%**	**#**	**%**	**#**	**%**		**-**	**%**
Horse trailer ownership	969	59%	445	58%	20	63%	47	72%	1,481	59%		-	73%
Truck ownership	1,212	74%	546	71%	24	75%	56	86%	1,838	73%		-	-

*23% of respondents ‘preferred not to answer’ this question in 2019

In 2019, nearly 40% of those participating in the equine industry were over the age of 55. This is an 11% increase when compared to the 2009 figures and indicates that the population involved with the equine sector is ageing. Notably, the over 55 age group in the equine industry is increasing at a faster rate than the same demographic for the province as a whole. Those participating in the industry under the age of 35 have remained largely consistent in the last 10 years and generally align with the provincial population average with slightly fewer individuals in the 19-35 bracket at 16% when compared to the 22% of the provincial average. Those in the 26-35 bracket (29%) have reduced in numbers when compared to the 2009 figure (38%) but is roughly in line with the provincial average.

About 23% of responding households preferred not to report their annual household income range in 2019. Of the remaining households who did provide an income range, 43% reported a household income greater than $100,000 which is approximately 10% greater than both the provincial average and the average from the 2009 study. Those in the race and sport sector report the greatest number of households earning more than $100,000 with more than half of all race and sport houses reporting so while guide/work/ranch has the fewest at 26%. Those earning $60,000-$100,000 account for 30% of responding households which is 5% greater than the BC average but 3% lower than the 2009 average. The remaining share of responding households (26%) reported an income of $60,000 or less which is 17% lower than the provincial average and 10% lower than that of the 2009 report.

Truck ownership is higher than horse trailer ownership across the industry with 73% of households reporting truck ownership versus 59% of households with a horse trailer. Truck ownership is largely consistent across the sectors with the guide/work/ranch sector reporting slightly higher ownership at 86%. Similarly, the race and guide/work/ranch sectors report higher than average trailer ownership at 63% and 72%, respectively. Trailer ownership, however, is down 14% when compared to 2009.

As Table 33 below highlights, most households indicated that they do not have any equine professionals as only 6% reporting an affirmative response to this question. This rate is higher in the race and guide/work/ranch sectors which report an average of 16% and 14%, respectively. The most frequently reported equine professions were farrier (28%), coach (24%) and veterinarian (15%).

Table 33: Number of equine professionals reported by responding households and the most commonly listed professions

Equine professionals	Recreation		Sport		Race		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Equine professionals	78	5%	57	7%	5	16%	9	14%	149	6%
Most common professions										
Farrier	26	35%	8	16%	-	-	4	36%	38	28%
Coach	12	16%	20	41%	-	-	1	9%	33	24%
Veterinarian	13	18%	5	10%	-	-	2	18%	20	15%
Equine massage therapist	7	9%	3	6%	-	-	3	27%	13	10%
Trainer	6	8%	5	10%	1	50%	-	-	12	9%
Hauler	5	7%	2	4%	1	50%	1	9%	9	7%
Other	12	16%	11	22%	-	-	1	9%	24	18%
Total	74	100%	49	100%	2	100%	11	100%	136	100%

Nearly 30% of households have reported to camp in BC for recreation purposes as depicted in Table 34. This activity is most common among the recreation sector in which 35% of respondents have signalled that they have recreationally camped in BC. Visiting guest ranches in BC as opposed to guest ranches outside the province is 2.5 times more common. These activities are reasonably split across the equine sectors.

Table 34: The rate at which respondents camp in BC and visit both BC and out-of-province guest ranches

Camping and guest ranches	Recreation		Sport		Race		Guide/work /ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Those that camp in BC for recreation	571	35%	134	17%	8	25%	19	29%	732	29%
Those that visit BC guest ranches	315	19%	74	10%	4	12%	8	12%	401	16%
Those that visit out-of-province guest ranches	118	7%	31	4%	-	-	1	2%	150	6%

Approximately half of the respondents indicated that their household spends time volunteering (Table 35). 'Horse shows' and 'riding clubs' are the most common places for individuals to volunteer with 27% of respondents volunteering at horse shows while one in four donates time to riding clubs. Less frequently mentioned options included 'therapeutic riding facilities' and 'equine rescue' which account for 7% and 5% of responses, respectively. Of those that do volunteer, they do so for an average of 79 hours per annum. However, those in the race sector report distinctly higher numbers with an average of 246 volunteer hours per year while those in sport log 66 hours every 12 months. Collectively, survey respondents donate approximately 91,883 hours per year. However, 51% of households determined that this question did not apply to them.

Table 35: Share of surveyed households that report volunteering, where they mostly volunteer and how many hours per year they volunteer

Volunteering	Recreation		Sport		Race		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Horse shows	340	21%	313	40%	8	25%	16	25%	677	27%
Riding clubs	403	25%	212	27%	5	16%	15	23%	635	25%
Therapeutic facilities	114	7%	63	8%	5	16%	4	6%	186	7%
Equine rescue	82	5%	23	3%	4	13%	7	11%	116	5%
Other	182	11%	69	9%	3	9%	11	17%	265	11%
N/A	889	54%	337	44%	17	53%	30	46%	1,273	51%
Total	1,632	100%	773	100%	32	100%	65	100%	2,502	100%
If yes, number of hrs?	Sum	Av.	Sum	Av.	Sum	Av.	Sum	Av.	Sum	Av.
Average annual number of volunteer hours	56,053	80	27,236	66	4,676	246	3,918	126	91,883	79

In terms of certification, only 8% of households indicated that they are certified with a national association (Table 36). The sport and race sector report the highest number of certifications at 16% and 28%, respectively.

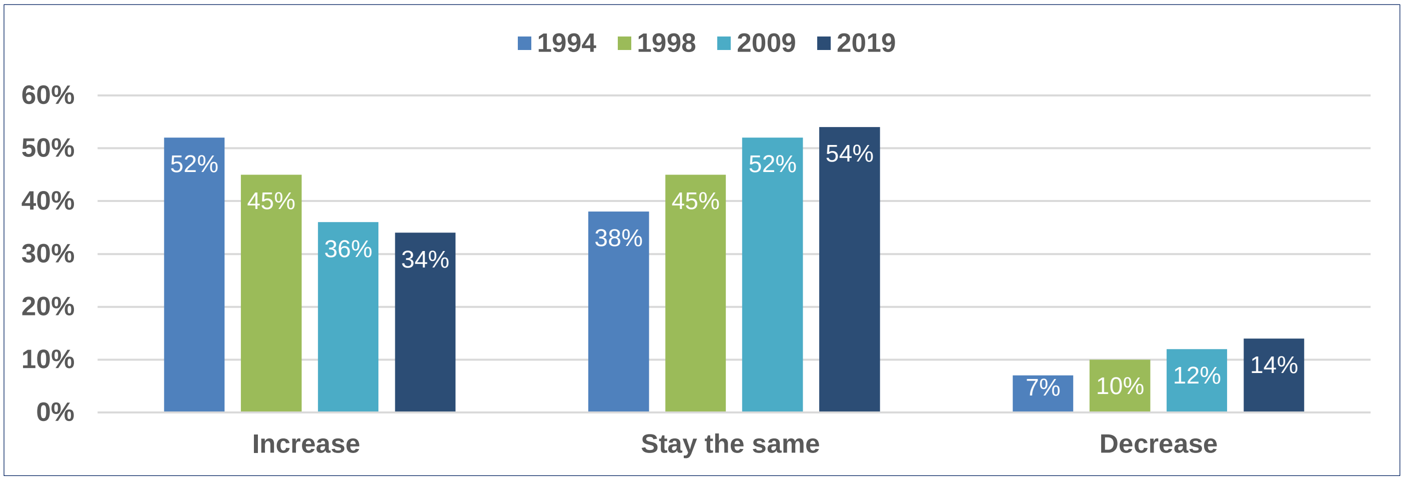
Table 36: Prevalence of national certification in the equine industry

National certification	Recreation		Sport		Race		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
No	1,329	81%	573	74%	17	53%	54	83%	1,973	79%
Yes	67	4%	125	16%	9	28%	4	6%	205	8%
N/A	236	14%	75	10%	6	19%	7	11%	324	13%
Total	1,632	100%	773	100%	32	100%	65	100%	2,502	100%

K. FUTURE INDUSTRY INVOLVEMENT AND CONCERNS

As depicted in Figure 5, more than one-third of responding households forecast their involvement in the equine industry in the next five years to increase. This is a slight decrease from 2009 but is not statistically significant. More than half of respondents said their involvement would remain the same which is roughly consistent with the 2009 study. Finally, 14% indicated that their involvement in the equine industry would decline. Again, this largely correspondents with sentiments from the previous report.

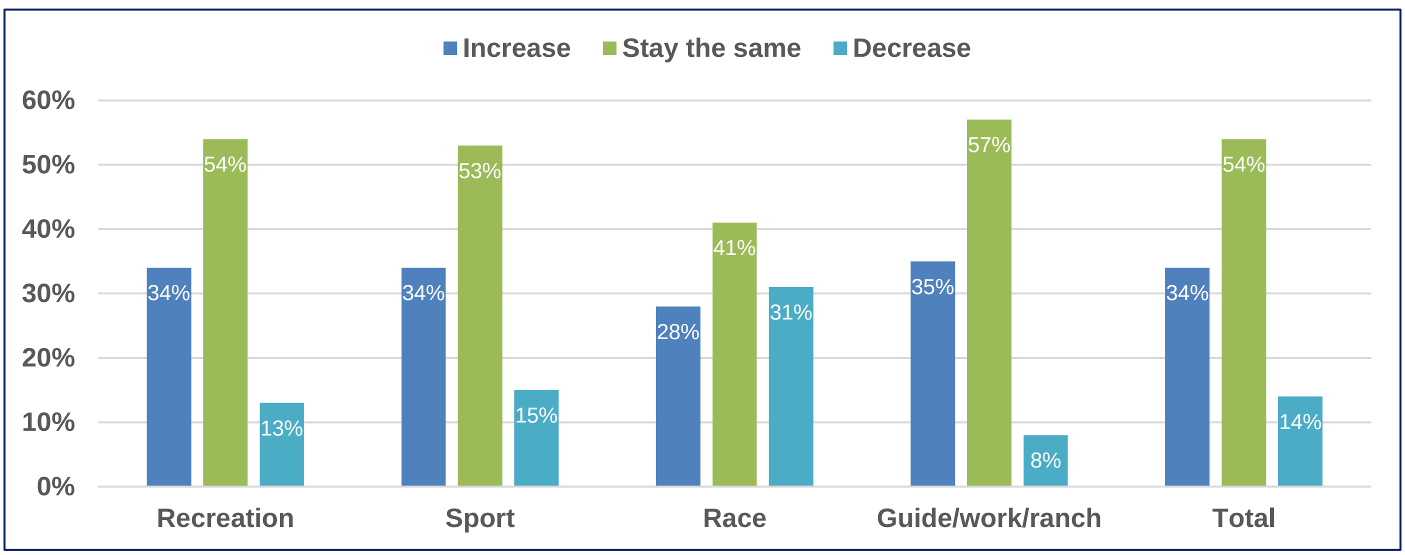
Figure 5: Survey respondent's forecasted future involvement in the industry; 1994-2009



Source: HCBC Equine industry Economic Impact Study 2019. Percentage totals for 2019 will not add to 100% as respondents could select multiple responses.

Figure 6 illustrates the industry's future intentions by sector. The recreation and sport sector largely reflect the industry averages discussed above. The race sector has twice as many respondents indicating their involvement is likely to decline while only 8% of those in the guide/work/ranch sector forecast a decline.

Figure 6: Survey respondents forecasted future involvement in the industry by sector, 2019



Source: HCBC Equine industry Economic Impact Study 2019. Percentage totals will not add to 100% as respondents could select multiple responses.

Table 37 outlines respondent's concerns regarding future growth of the equine industry. Nearly three-quarters of responding households expressed cost concerns when asked to detail the future constraints to the growth of the equine industry. This is particularly true for the sport and race sector in which 85% and 81% of households, respectively, reported concerns surrounding costs. Safety on roads/trails, urban encroachment and access to trails were reported in almost equal measure with close to half of all household reporting concerns with these factors. However, the race sector indicates less concern with these three factors and greater concern for the economy and tax structure. The economy is also a significant concern for those in the guide/work/ranch sector. Cost being the primary concern with regards to future industry growth is a finding consistent with the 2009 study.

Table 37: Survey respondent's concerns that limit the expansion of the BC equine industry

Expansion concerns	Recreation		Sport		Race		Guide/work/ ranch		Total	
	#	%	#	%	#	%	#	%	#	%
Costs	1,114	68%	660	85%	26	81%	48	74%	1,848	74%
Safety on roads/trails	917	56%	296	38%	6	19%	16	25%	1,235	49%
Urban encroachment/ price of land	830	51%	351	45%	12	38%	20	31%	1,213	48%
Access to trails	923	57%	242	31%	8	25%	15	23%	1,188	47%
Lack of public facilities	607	37%	291	38%	7	22%	16	25%	921	37%
Economy	524	32%	283	37%	14	44%	29	45%	850	34%
Lack of private facilities	200	12%	139	18%	2	6%	4	6%	345	14%
Tax structure	146	9%	117	15%	13	41%	11	17%	287	11%
Other	107	7%	40	5%	5	16%	8	12%	160	6%
Total	1,632	100%	773	100%	32	100%	65	100%	2,502	100%

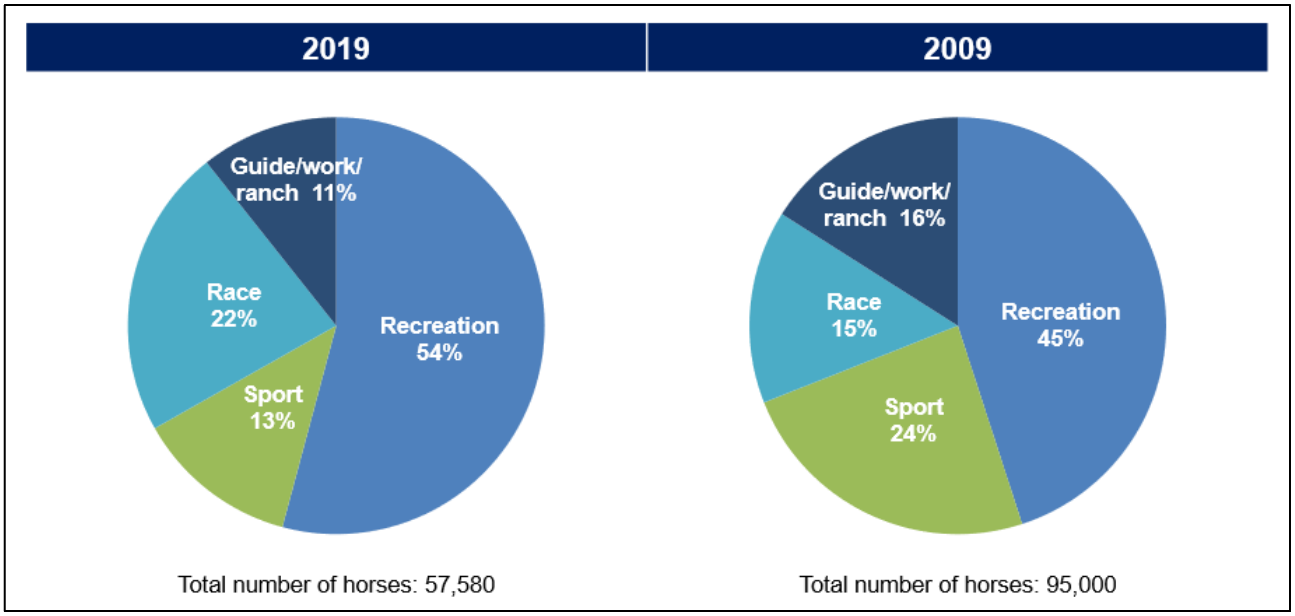
Percentage totals will not add to 100% as respondents could select multiple responses.

III. ECONOMIC IMPACT ANALYSIS

A. COMPARATIVE SIZE OF THE EQUINE INDUSTRY SECTORS: 2009-2019

The size of the equine industry and its respective sectors can be measured in several different ways. Below the equine sectors are split by the number of horses in the industry and compared with 2009 data. Figure 7 depicts the share each equine sector accounts for in terms of horse numbers. The recreation sector continues to account for the greatest number of horses. The share of race sector horses has grown from 15% in 2009 to 22% in 2019 while the sport and guide/work/ranch sectors have seen some contraction over the same period. It is worth noting that while the split of horses across the equine sectors has not changed significantly, the number of horses which comprise the equine industry has. In 2009, it was estimated that there were 95,000 horses in BC. In 2019 that number was estimated to be 57,580.

Figure 7: Size of equine industry by sector in 2009 and 2019

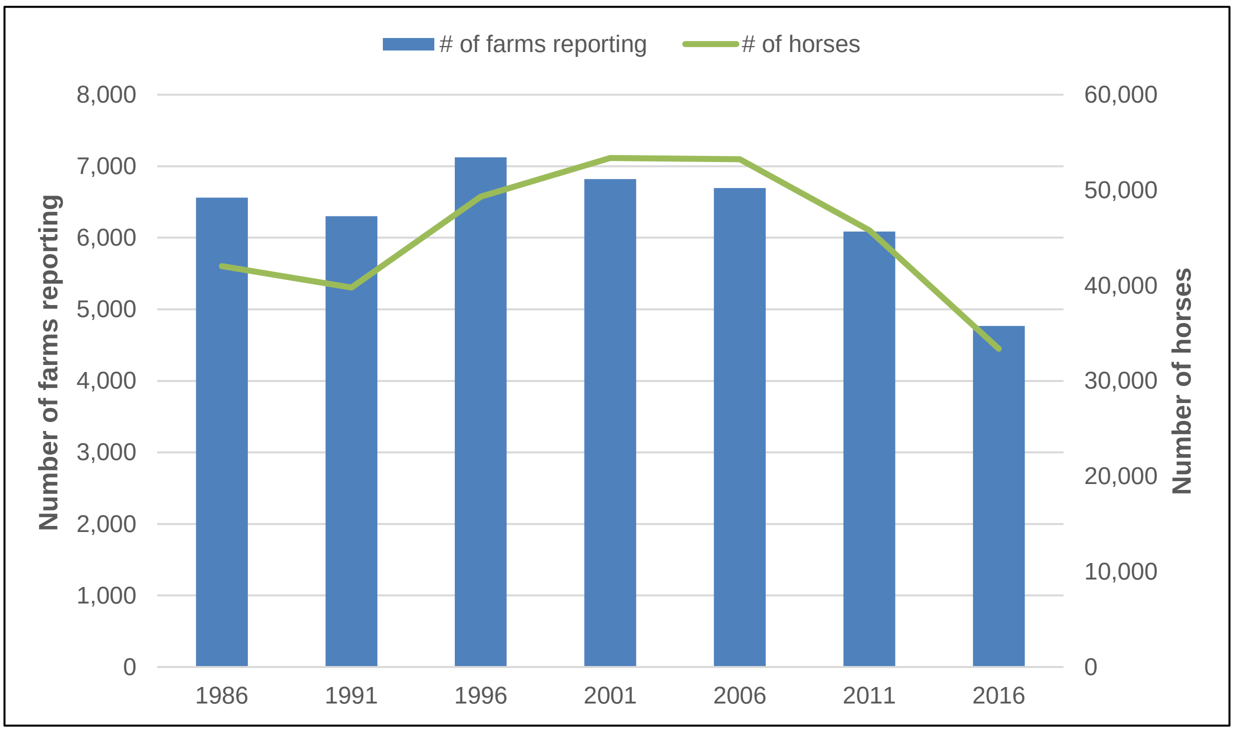


Source: HCBC Equine industry Economic Impact Study 2009 and 2019

B. NUMBER OF PROVINCIAL HOUSEHOLDS AND HORSES

According to Statistics Canada's Census of Agriculture, 4,767 farms in BC reported having horses in 2016. This is a decrease compared to data from the 2006 census from which the 2009 HCBC Equine Industry Economic Impact Study sourced its figures. Figure 8 below depicts this as well as a decline in the number of horses in BC as estimated by the Census of Agriculture. In 2006, 53,246 horses were estimated for the province while in 2016 this number dropped to 33,363. The census of agriculture only captures a portion of all horses in the province because many are housed on properties that are not classified as farms. As such, both the 2009 and 2019 studies have taken measures to accurately reflect the number of horses in the province and thus this explains the difference in the number of horses reported by the Census of Agriculture (Figure 8) and the estimated number of horses reported in the HCBC studies (Figure 9).

Figure 8: Census of Agriculture data highlighting the number of farms and the number of horses in BC



Source: Census of Agriculture 1986-2016

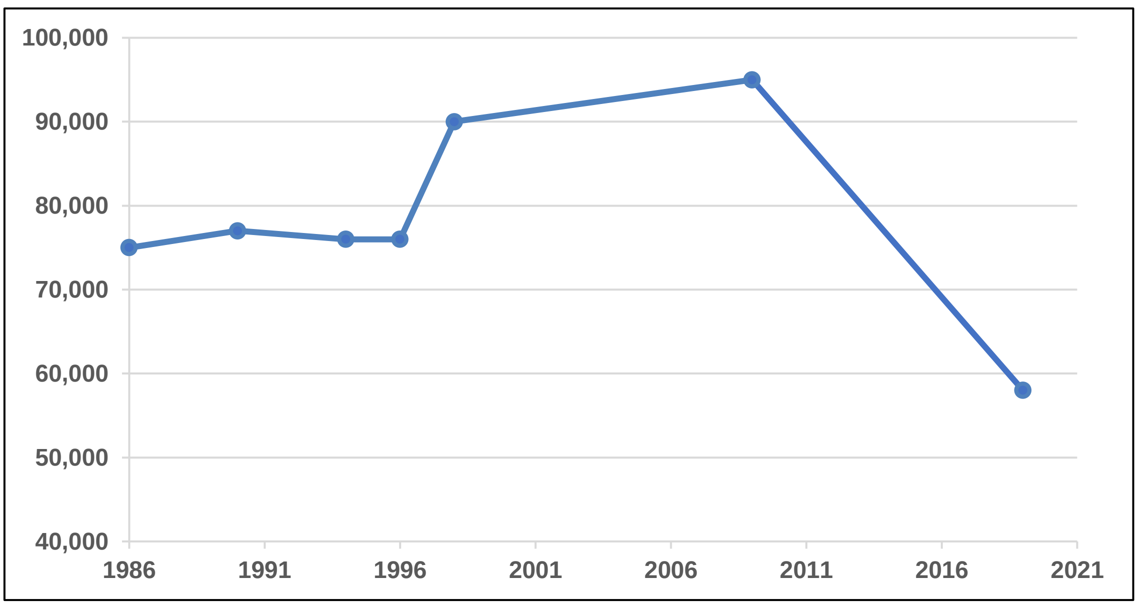
Based on census data and survey responses, there are estimated to be approximately 19,863 households involved in the equine industry (Table 38). The greatest proportion (70%) of these households are based in the recreation sector while the sport sector is the next biggest accounting for 14%. Of these 19,863 households, 86% own at least one horse with an average of 3.3 horses per owning household. Ownership is at the highest in the race sector with an average of 8 horses per household in contrast with those in the recreation sector that have an average of 2.6 horses per owning household. The average value of a horse varies among equine sectors. Horses in the sport and race sector were reported to have the highest average value at nearly $16,000 while recreation and guide/work/ranch horses are valued at less than a third of that. The total capital value of all horses in BC is estimated to be $480 million.

Table 38: Number of horses by sector and the average capital value of BC horses by sector

	Recreation	Sport	Race	Guide/work/ ranch	Total
Number of BC equine households	13,904	2,781	1,788	1,390	19,863
Total number of households owning horses	11,995	2,349	1,620	1,230	17,194
Number of horse properties	7,568	1,151	1,041	1,071	10,831
Average number of horses per owning household	2.6	3.1	8	5	3.3
Total number of horses	31,188	7,282	12,960	6,150	57,580
Average value of horse	$4,441	$15,926	$15,316	$4,429	$8,340
Capital value of horses	$138,505,995	$115,974,908	$198,499,668	$27,237,179	$480,217,750

While the number of households hasn't significantly declined, the number of horses which households keep has dropped by approximately 40% in the last 10 years. The 2009 study estimated there to be approximately 95,000 horses in BC while the 2019 places this figure at 57, 580 (Figure 9). This decline echoes the decline seen in the census numbers which is approximately 37%. The recreation sector accounts for the largest share of horses, followed by race.

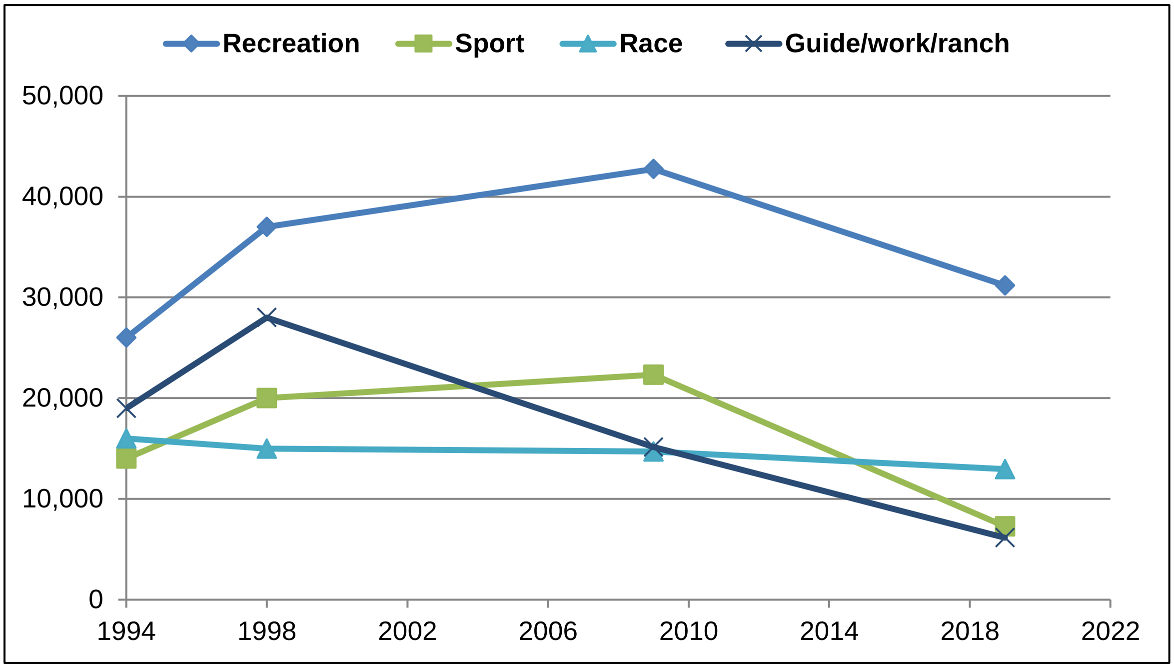
Figure 9: Estimated number of horses in BC 1986-2019



Source: HCBC Equine industry Economic Impact Study 2009 and 2019

Figure 10 tracks the distribution of horses by equine sector. Recreation continues to account for the greatest number of horses in BC. The race sector's share has increased, eclipsing the sport and guide/work/ranch sectors. However, each sector total is down on previous years.

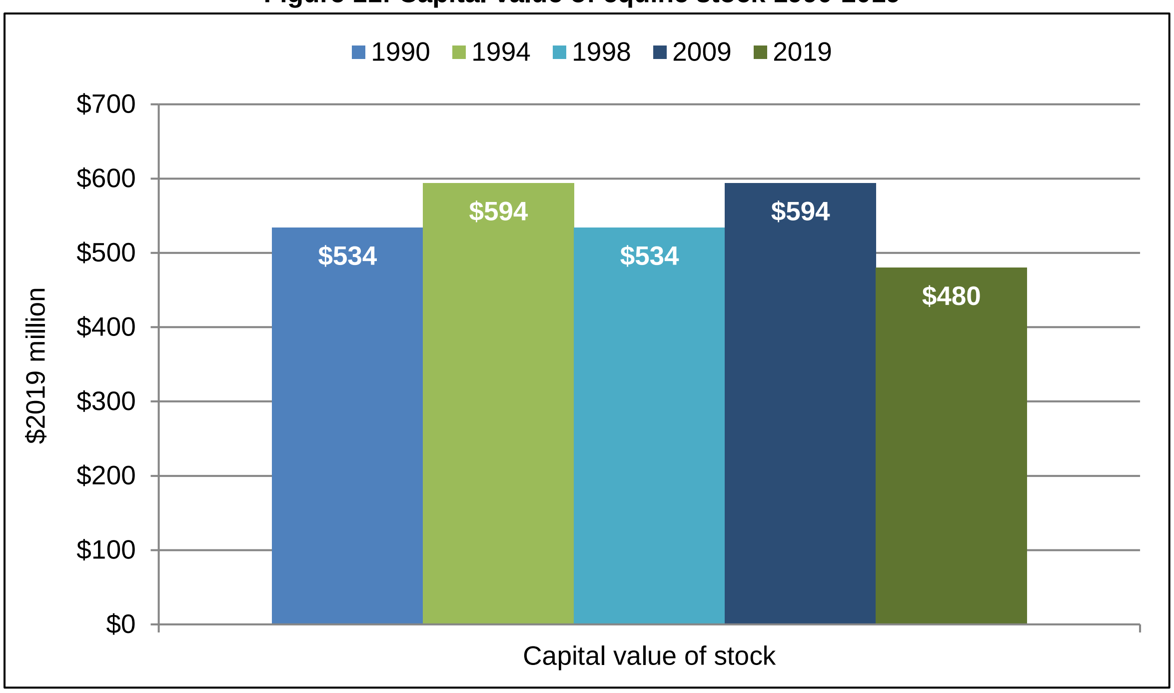
Figure 10: Number of horses by sector 1990-2019



Source: HCBC Equine industry Economic Impact Study 2009 and 2019

The trend in the capital value of stock in the equine industry over the last 29 years is captured in Figure 11. The values have been adjusted for inflation to 2019 dollar values. The total capital value of stock in 2019 is $480 million compared to $594 million in 2009. Most of this drop in value can be largely attributed to the marked decline in absolute horse numbers.

Figure 11: Capital value of equine stock 1990-2019



Source: HCBC Equine industry Economic Impact Study 2009 and 2019

C. LAND, BUILDINGS AND EQUIPMENT USED TO KEEP HORSES

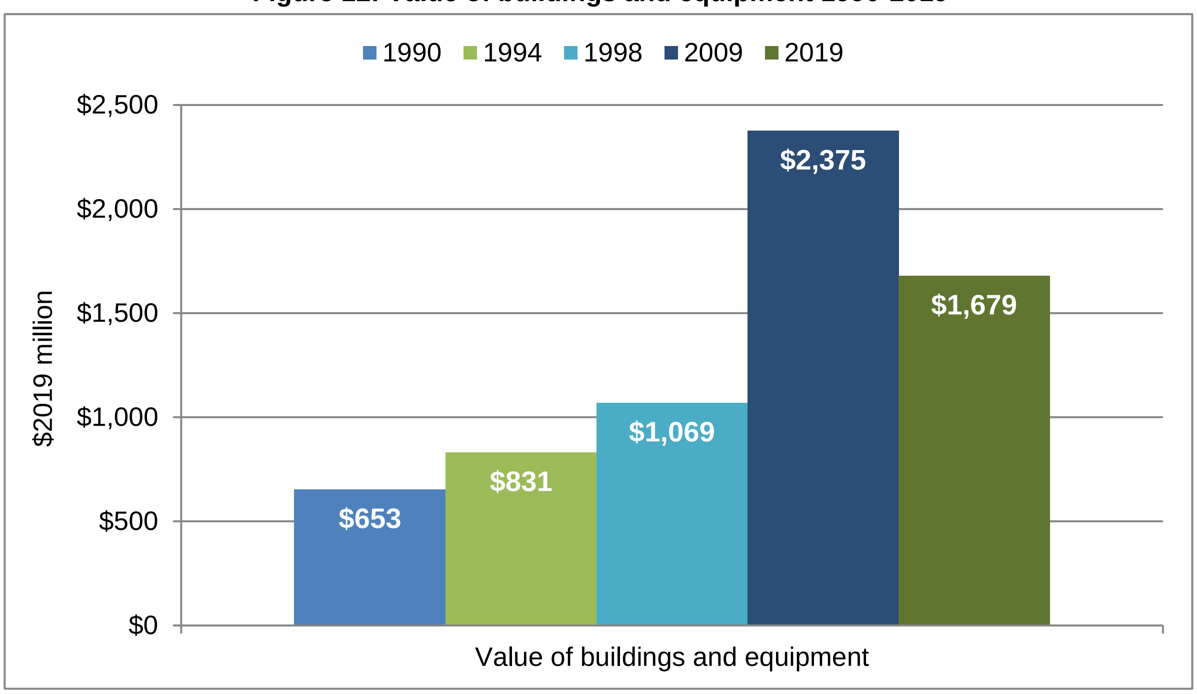
Horse properties devote approximately 202,561 acres to keeping horses (Table 39). Roughly half of all these acres are devoted to horses categorized in the recreation sector. The race sector accounts for the next greatest share of acres at 53,895 while both the guide/work/ranch and sport sectors account for fewer acres at 29,921 and 16,344 acres respectively. The race sector has the largest average number of acres per horse property at 51.8 acres per household while the recreation sector has the fewest at approximately 13.5 acres. Horse properties report an estimated total value of $1.67 billion for building and equipment used to keep horses. The recreation sector accounts for the largest share, with its total estimated at $846 million (50% of the total industry average). The sport and race sectors are more than 1.5 times that of the guide/work/ranch sector.

Table 39: Estimated number of acres and value of buildings and equipment used to keep BC horses

	Recreation	Sport	Race	Guide/work/ ranch	Total
Acres of land used for horses - average per horse property	13.5	14.2	51.8	28.0	18.7
Total estimated number of acres	102,401	16,344	53,895	29,921	202,561
Total estimated value of buildings and equipment	$846,068,905	$332,825,506	$315,960,263	$184,409,352	$1,679,264,026

Figure 12 below shows the value of buildings and equipment used to keep horses in BC by horse properties from 1990-2019. The figures have been adjusted for inflation. The industry experienced steady growth in the value of buildings and equipment between 1990 and 1998. By 2009, the value of buildings and equipment used to keep horses more than doubled, totalling up to $2.3 billion. In 2019, the total value dropped by approximately 17%.

Figure 12: Value of buildings and equipment 1990-2019



Source: HCBC Equine industry Economic Impact Study 2009 and 2019

D. ECONOMIC IMPACT OF BC EQUINE ACTIVITIES

To calculate the total economic impact of the BC equine industry direct operating expenses and secondary expenses were analyzed. Direct operating expenses include all purchases relating to equipment, buildings and horses while operating expenses comprise all costs relating to horse ownership including maintenance, training and exhibiting horses among other things. Table 40 highlights the operating expenses reported by the BC equine industry in 2019. Expenditure on 'repair and maintenance building and equipment' ($97 million) is the largest operating expense for those in the BC equine industry followed by 'feed and bedding' ($87.8 million) and vet and farrier care ($78.3 million). Boarding costs, outside labour and horse care products and services, are the next most significant expenses amounting to $49.6 million, $36.4 million and $28 million, respectively. Those in the BC equine industry spend approximately the same on travel as they do on tack at roughly $17 million a year while expenditure on clothes and manure disposal are the lowest spend items at $5 and $4 million, respectively. On average, households in the equine industry spend approximately $21,240 a year on operating costs for their horses. The race sector reports the largest spend at $72,794 per household while the recreational sector average is $13,814 a year. The total annual operating expenses of the BC equine industry in 2019 are estimated at $421 million.

Table 40: Operating expenses of the BC equine industry

Operating expenses	Recreation	Sport	Race	Guide/work/ ranch	Total
Repair and maintenance building and equipment [NET]	$44,839,594	$13,439,365	$34,381,392	$4,627,168	$97,287,518
Feed & bedding	$42,920,876	$14,952,093	$22,541,951	$7,398,185	$87,813,106
Vet & farrier care	$35,857,771	$14,484,927	$24,456,498	$3,535,724	$78,334,919
Boarding cost	$26,913,347	$10,696,539	$10,984,578	$1,054,572	$49,649,037
Outside labour	$12,452,370	$7,035,101	$15,213,046	$1,778,197	$36,478,714
Horse care products & services [NET]	$8,926,208	$5,967,490	$12,259,532	$862,033	$28,015,262
Travel	$7,795,369	$4,255,474	$4,526,267	$1,391,765	$17,968,875
Tack	$8,175,405	$4,354,655	$3,700,384	$1,027,487	$17,257,930
Clothes	$2,590,732	$1,417,256	$740,673	$307,736	$5,056,397
Manure Disposal	$1,598,931	$1,053,904	$1,324,630	$43,102	$4,020,567
Average per household	$13,814	$27,926	$72,794	$15,841	$21,240
Total annual operating expenses	$192,070,604	$77,656,803	$130,128,950	$22,025,969	$421,882,326

The operating expenses outlined above have been used, in conjunction with secondary expenses, to calculate the total economic impact of the provincial equine industry. Secondary expenses have been calculated using direct operating expenses and an economic multiplier.[1] Table 41 shows the total economic impact of the sector by adding direct and secondary expenditures together. The total economic impact of the BC equine industry in 2019 was calculated to be $784 million. The recreation sector accounts for 43% of this impact, followed by the race sector at 33% and the sport sector at 20% while the guide/work/ranch sectors amount to 4%.

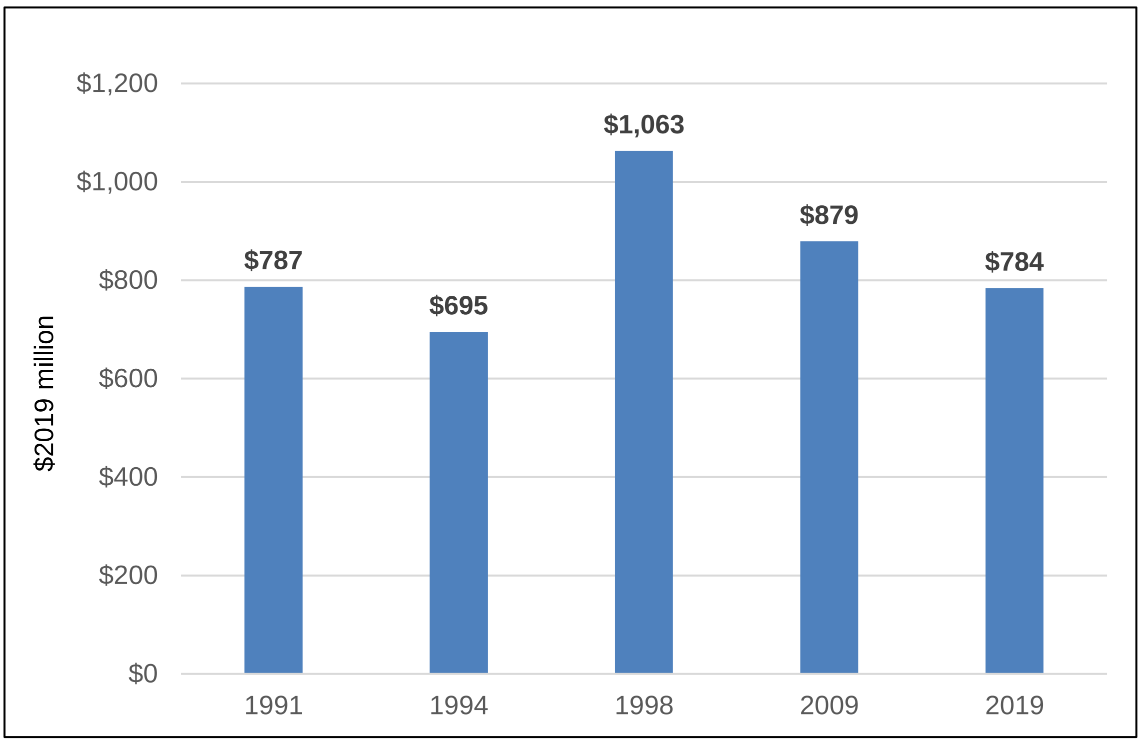
[1] The multiplier from the 2009 study has been reemployed in the 2019 study for consistency purposes.

Table 41: Total economic impact of the BC equine industry

	Operating expenses	Multiplier	Secondary expenditures	Total Economic Impact
Recreation	$192,070,604	(x.75)	$144,052,953	$336,123,557
Sport	$77,656,803	(x1)	$77,656,803	$155,313,606
Race[2]	$130,128,950	(x.1)	$130,128,950	$260,257,900
Guide/work/ranch	$22,025,969	(x.50)	$11,012,984	$33,038,954
Total	$421,882,326		$362,851,690	$784,734,017

Figure 13 tracks the economic impact of the BC equine industry over the last 28 years. The figures have been adjusted for inflation in 2019 dollar values. As stated, the total economic impact for the BC equine industry in 2019 is estimated at $784 million. This represents a less than 10% contraction when compared to the figure reported in the 2009 study.

Figure 13: Economic impact of the equine industry 1991-2019

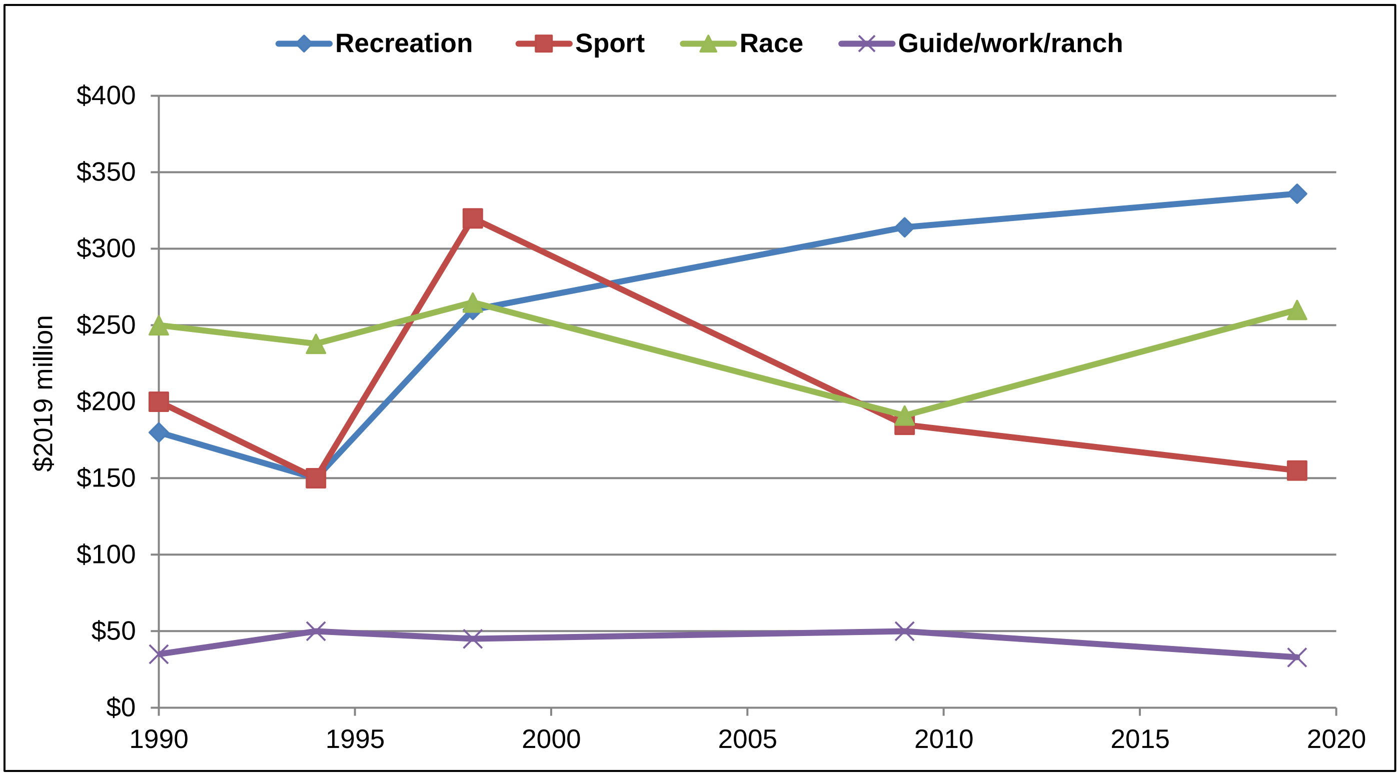


Source: HCBC Equine industry Economic Impact Study 2009 and 2019

Figure 14 tracks the economic impact of each equine sector over the last 29 years. This informs that the recreation sector continues to account for the largest share of economic activity and while race and sport once accounted for a similar share, in 2019 the race sector now eclipses the sport sector by about 40%. The guide/work/ranch sectors continue to account for the smallest share of economic activity.

[2] The calculation for total economic impact for the racing sector does not include off-farm training and track operations as in previous years as this data was unavailable.

Figure 14: Economic contribution by sector



Source: HCBC Equine industry Economic Impact Study 2009 and 2019

E. TAXES AND EMPLOYMENT

Expenditures made by households in the equine sector result in indirect tax revenue for provincial and federal governments. As shown in Table 42, direct tax revenues currently total $63.7 million annually.

Table 42: Direct government tax revenues from operational expenditures in the equine industry

	Expenditure	Prov. Rate*	Fed. Rate*	Prov. taxes	Fed. taxes	Total
Equipment maintenance	$97,287,518	7.20%	13.75%	$7,004,701	$13,377,034	$20,381,735
Feed/bedding	$87,813,105	2.50%	10%	$2,195,328	$8,781,311	$10,976,638
Tack/Misc.	$22,314,327	7.60%	10%	$1,695,889	$2,231,433	$3,927,322
Vet/Farrier	$78,334,919	8.50%	12.50%	$6,658,468	$9,791,865	$16,450,333
Travel	$17,968,875	3.90%	8.50%	$700,786	$1,527,354	$2,228,141
Wages	$36,478,714	5%	15%	$1,823,936	$5,471,807	$7,295,743
Boarding	$49,649,037	-	5%	-	$2,482,452	$2,482,452
Total	$389,846,495	-	-	$20,079,108	$43,663,255	$63,742,363

*Weighted rate estimated from the breakdown of goods vs. wages in the different areas and the resulting sales and payroll taxes

As described in Table 43, there are an estimated 5,620 full-time equivalent (FTE) jobs supported by the BC equine industry. Nearly 40% of these jobs are categorized as 'maintenance of horses' which relates to households hiring outside labour to look after their horses. The other large employment category relates to those 'training horses and riders' which accounts for a third of all FTE jobs supported by the BC equine industry. Vet and farriers account for approximately 15% of the supported jobs while those employed in feed/tack stores represent roughly 10% of all those employed in the BC equine industry.

Table 43: Employment Supported by Equine Industry

	Source of estimate	Total Direct FTEs	Total secondary FTEs (1X multiplier)	Total FTE
Maintenance of horses	Outside FTEs[3] hired by survey households	1,048	1,048	2,096
Training of horses and riders	Ratio-based analysis using 2009 findings[4]	964	964	1,928
Track Operations	Ratio-based analysis using 2009 findings[5]	76	76	152
Veterinarians	1 FTE/$253,700 in estimated total sales[6]	149	149	298
Farriers	1 FTE/$118,700 in estimated total sales[3]	270	270	540
Feed/Tack Stores	Ratio-based analysis using 2009 findings[7]	303	303	606
Total		2,810	2,810	5,620

[3] FTE=37.5 hours per week, 50 weeks per year
[4] Figure reported in 2009 was adjusted proportionately to the change in the number of households in the race and sport sectors from 2009-2019
[5] Figure reported in 2009 was adjusted proportionately to the change in the number of households in the race sector from 2009-2019
[6] Ratio of sales to FTEs used in 2009 was adjusted for inflation to reflect 2019 dollars and applied against expenditures identified in the 2019 HCBC survey
[7] Figure reported in 2009 was adjusted proportionately to the change in the total number of estimated horses in the province 2009-2019

APPENDICES

APPENDIX I

STUDY METHODOLOGY

Survey design and review

The 2019 survey consisted of 61 questions. The survey was predominately based on the 2009 survey, repeating all questions. Upon review, several additional questions were added to the 2019 survey. Uniformity was prioritized throughout the survey design and review stage to ensure trend analysis was possible with previous iterations of the survey. It is important to note, however, that due to the length of time between studies and therefore data points, identified trends do not capture smaller year to year fluctuations. Nonetheless, the studies provide a macro evaluation of developments in the equine industry while also producing valuable data on its economic status.

Survey circulation

Survey circulation was largely based on HCBC membership. To ensure a high response rate the survey remained open for approximately 10 weeks and was circulated by post, email and online. Survey invites were emailed to all members who had an email address listed with HCBC. Each email contained a personalized link to the online survey. Email invitees were prompted at regular intervals over the 10 weeks to participate in the survey.

For those without an email address listed with HCBC, a hard copy of the survey was sent to them by postal mail with an option to complete and return the survey by mail, fax or email. All returned surveys from the ground mail population were entered into the survey software to ensure all responses were collated together. The link to the online survey was also circulated more broadly among other industry associations (listed below) and advertised on their websites.

- Horse Council BC;
- Harness Racing BC;
- Canadian Thoroughbred Horse Society - BC Chapter;
- BC Rodeo Association;
- Horsemen's Benevolent Association;
- BC Cutting Horse Association;
- BC Quarter Horse Association;
- BC Barrel Racing Association;
- BC Cattlemen's Association;
- BC Carriage Drivers Association;
- BC Therapeutic Riding Association;
- Dressage BC;
- Endurance Riders of BC;
- Horse Trials BC; and
- BC Hunter Jumper Association.

To enhance the response rate, follow up phone calls were made to a selection of households. Phone calls commenced shortly after the first round of emails and letters were sent and continued until the survey closed. Households were prioritized for a phone call if they had been shown to have accessed their personalized survey link but did not complete the survey. The survey software used in this study highlighted this cohort of households.

Survey results analysis

As such, 2,502 complete survey responses were included and analyzed as part of the final data set. The responses from the 2,502 surveys were cleaned, collated and coded. Excel, in conjunction with SPSS (Statistical Package for the Social Sciences) software, was used to analyze the final data set. Comparative analysis was conducted across some survey results when data from previous studies were available.

The 2019 survey achieved a 19% response rate as can be seen in Table 44 below. The response rate was calculated using the number of unique household addresses (12,030) from HCBC membership. An additional 286 responses were received via an open survey link which were not included in the response rate.

Table 44: Survey response summary 2019

Response summary	Total
Total households with unique mailing address	12,030
Number of completed surveys via personalized survey link	2,216
% response rate	19%
Number of completed surveys via open link	286
Total completed surveys	2,502

Economic extrapolation

To estimate the number of horses, households, and expenditures by equine sector and for British Columbia the number of farms reporting horses in the 2016 Census of Agriculture and the share of 2019 HCBC Survey respondents who indicated that they are a farm were used together to estimate the total number of households in the equine sector in British Columbia. Next, because the size of each sector population using secondary data was unable to be determined, it was assumed that the distribution of households among sectors was equal to the distribution in 2009. Applying the sector distribution from 2009 to the estimate of total households in 2019 resulted in the estimate of equine households by sector. Average values and responses from the 2019 survey along with the estimated number of equine households by sector and overall together form the basis of all other estimates in this report. This approach is detailed in Table 45.

Table 45: Estimating Equine Households by Sector

	Recreation	Sport	Race	Guide	Total
2016 Census of Agriculture – number of farms reporting horses					4,767
2019 Survey – share of respondents indicating they are classified as farm					24%
Estimated total number of equine households					19,863
Distribution of households in 2009	70%	14%	9%	7%	100%
Estimated equine households by sector, 2019	13,904	2,781	1,788	1,390	19,863

To calculate the total economic impact of the BC equine industry an economic multiplier was used which estimates secondary expenses as a proportion of the direct operational expenditures. The multiplier from the 2009 study was re-employed in the 2019 study for consistency purposes. The multiplier used in 2009, which was based on previous equine studies predominantly in the race sector, estimated secondary expenditures at from 1 to 1.5 the direct operating expenditures. Wages are typically spent quickly so, in general, the more labour intensive an industry, the higher the secondary expenditures. Considering this, secondary expenditures were estimated by using a conservative multiplier of 1 for the more labour-intensive racing and sport sectors and .75 and .5 for the recreational and work sectors respectively.

APPENDIX II

STUDY LIMITATIONS

Determining the size of each sector

No new data was available when it came to estimating the population size of the five individual equine sectors. As such, the proportional division from the 2009 study was re-employed at the same proportion for the 2019 report. While this methodology does not provide an update to the population distribution, as no new numbers were available, it does allow for comparative analysis.

Limited data available from previous studies

Raw data for most survey years is not available and so comparisons made in 2019 were limited to those shown in the 2009 report.

Survey bias

Most surveys have the potential to contain some survey biases. Common biases included sampling bias, non-response bias and question-order bias among other things. The HCBC 2019 survey does not operate free from the risk of bias. Possible biases for the HCBC survey include convenience sampling and undercoverage sampling.

APPENDIX III

HCBC EQUINE INDUSTRY ECONOMIC IMPACT SURVEY 2019

Section 1: Your Horses

1. Do you own one or more horses? Yes ☐ No ☐
2. Do you lease one or more horses? Yes ☐ No ☐
3. Do you access horses through an equine facility? Yes ☐ No ☐
4. Please describe the **FEMALE ONLY** horses you (or members of your household) **own** in the table below.

Breed Type	**Sex**	**Number**	**Total $ Value** (based on current market)
	Female		
	Female		
	Female		
	Female		
	Female		

4.i) Please describe the **MALE ONLY** horses you (or members of your household) **own** in the table blow.

Breed Type	**Sex (Stallion or Geldin**	**Number**	**Total $ Value** (based on current market)

4.ii) Please indicate whether your horses have increased, decreased or stayed the same in value?
Increased ☐ Decreased ☐ Stayed the same ☐

If the value has increased or decreased can you explain why?

____

____

____

4.iii) How many years have you owned horses for?

____

4.iv) How many years have you been involved with horses?

____

5. What do you do with your horses? Number all that apply from what you do the most (ranked 1) to least.

Race - Thoroughbred		Rodeo		Guest Ranch Trail horses	
Race – Standardbred		Reining		Logging	
Race - Other (Arab, QH)		Cutting		Working Ranch horses	
Show Eventing		Penning		Commercial Carriage Drivi	
Show Hunter/Jumper		Roping		Breeding	
Show Dressage		Barrels		Lesson String	
Show General Performance/Breed		Endurance		Fox Hunt	

Show Western		Competitive Trail Riding		Riding lessons only	
Driving		Recreational Riding		Other – please list below	

Other:____

6. How many events/races did you attend in the following years? 2016_________ 2017__________ 2018_____
   6.i) How many offered prize money? 2016____________ 2017__________ 2018___________
   6.ii) How many km did you drive to attend? 2016____________ 2017__________ 2018___________
   6.iii) How much purse/prize money did your horses earn? 2016____________ 2017__________ 2018_______

7. On average over the past three years how much did you spend on the following in order to participate in your chosen equestrian activity? Tack $__________ Clothing $__________ Travel Expenses $__________

8. Do you use your horse for pleasure riding? Yes ☐ No ☐ (If no, skip to question 10)

   8.i) If you use your horse for recreational riding, approximately how many days a year do you ride? ______________

9. Where do you usually ride? (check all that apply)

   Ring/Arena ☐ Roads ☐ Designated Equestrian Trails ☐ Public land ☐ Private land ☐ Other ______________________

10. When buying a horse where do you first start looking? (Check all that apply). Online/websites ☐

    Printed equine publication ☐ Horse trainers/coaches ☐ Industry Contacts ☐ Sales Barns ☐ Breeder ☐

11. Have you ever acquired a horse through a rescue facility? Yes ☐ No ☐
    11.i) If yes, which rescue facility? ____

    11.ii) Approximately how much did you pay for the horse from the rescue facility? $____________________________

12. Do you board your horses out at any time during the year? Yes, always (12months of the year) ☐ Very Frequently (8-11 months) ☐ Frequently (5-8 months) Occasionally (3-4 months) Rarely (1-2 months) ☐ No, never ☐ (If no, please skip to question 13)

    12.i) If you board your horse out at any time during the year, how much do you pay per month for:

Full Board (per month)	$	Semi-board (per month)	$
Pasture Board (per month)	$	Board & Training Race (per month)	$
Self-board (per month)	$	Board & Training Sport (per month)	$

13. Do you keep your horses at home at any time during the year? Yes ☐ No ☐

Section 2: Equine Welfare

14. Approximately how much do you spend per year on the following goods and services?

Veterinary Care	$	Grooming Products	$
Farrier	$	Fencing	$
Equine Chiropractic	$	Barn Equipment	$
Equine Dental	$	Farm Machinery	$
Equine Massage	$	Feed	$
Stud Fees	$	Bedding	$
Tack	$	Outbuilding Maintenance	$

Mortality Insurance	$	Manure Disposal	$

15. What do you believe is the highest risk factor affecting the health/welfare of your horse? Please rank 1 as the highest and 8 as the lowest from the following list.

Colic		Vehicle impact		Transportation	
Fire		Infectious Disease		Theft	
Permanent injury		Chronic lameness		Other- Define_________________	

16. Do you practice any on farm biosecurity protocols? Yes ☐ No ☐ If yes, please describe:_________________________
____

17. Do you breed horses? Yes ☐ No ☐ (If no, skip to question 26)
18. If you breed horses how many do you have of the following: Broodmare(s) _____ Stallion(s) _____
19. What is the approximate value of: Broodmare(s) $__________ Stallion(s) $____________ Young stock $_________
20. How many outside mares will breed to your stallion in a season? __________
21. What is the stud fee? $ _________ Value of semen? $_________
22. Do you offer: Live cover ◻ Fresh Semen ◻ Frozen Semen ◻ Other_________________
23. Do you offer: AI on farm ◻ Ship locally ◻ Ship out of province ◻ Ship internationally ◻ Other____________
24. How many foals do you produce each year? ___________________
    24.i) How many young stock do you sell each year? _______________________________________
25. On average has your breeding farm activity increased ☐ decreased ☐ or stayed the same ☐ over the past five years? Can you explain why?
    ____
    ____
    ____
    ____
26. What do you feel is an acceptable method of disposing of infirm, unsound or unwanted horses? Please indicate your 1st 2nd and 3rd choice.
    Gift ____ Veterinarian Euthanasia _____ On Farm Euthanasia _____ Humane processing ______ Auctions _______

Section 3: Your Horse Farm

27. How many acres do you own _______, or lease ________ 24.i) How many acres are used for your horses? ________
28. Is your land classified as a farm by the BC Farm Tax Assessment Authority? Yes ☐ No ☐ Not Applicable ☐
    28.i) If you are classified as a bona fide farmer is it based on an equine business? Yes ☐ No ☐ Not Applicable ☐
    28.ii) Do you have a farm business plan? Yes ☐ No ☐ Not Applicable ☐
    28.iii) If yes, do you set farm business goals annually? Yes ☐ No ☐ Not Applicable ☐

29. Will you file a farm income tax form with your 2018 return? Yes ☐ No ☐ Not Applicable ☐

30. Do you produce other agricultural products? Yes ☐ No ☐ If yes please describe:
____
____
____

    30.i) What is the annual value of these other agricultural products?
    $____

31. How many members of your household (including yourself) are employed in the horse industry?

    Number of full-time household members employed in the horse industry ____________

    Number of part-time household members employed in the horse industry ____________

    31.i) If you have household members working full time, what is the approximate annual salary they are paid from employment in the horse industry? Please include yourself.

    Household Member 1 _______________ Household Member 2 ______________ Household Member 3_______________
    Household Member 4 _______________ Household Member 5 ______________ Household Member 6 ______________

    31.ii) If you have household members working part time how many hrs per week do they work? ___________ How many weeks per year do they work? _____________ What is their pay per hour $_____________

    Household Member 1: hrs per week ___________ Weeks per year ____________ Pay per hr ________________

    Household Member 2: hrs per week ___________ Weeks per year ____________ Pay per hr ________________

    Household Member 3: hrs per week ___________ Weeks per year ____________ Pay per hr ________________

    Household Member 4: hrs per week ___________ Weeks per year ____________ Pay per hr ________________

    Household Member 5: hrs per week ___________ Weeks per year ____________ Pay per hr ________________

32. Also, do you employ outside labour (other than your household) to look after your horses? Yes ☐ No ☐

    32.i) How many how many hours per week do you hire a person/people, for how many weeks per year and what is the pay per hour?

    Employee 1: hrs per week ______________ Weeks per year _______________ Pay per hr ________________
    Employee 2: hrs per week ______________ Weeks per year _______________ Pay per hr ________________
    Employee 3: hrs per week ______________ Weeks per year _______________ Pay per hr ________________
    Employee 4: hrs per week ______________ Weeks per year _______________ Pay per hr ________________
    Employee 5: hrs per week ______________ Weeks per year _______________ Pay per hr ________________

33. How do you dispose of your horse manure? Commercial manure removal company ☐ Spread it on your fields ☐ Spread it on your neighbour's fields ☐ Compost it and use/sell as fertilizer ☐

    33.i) If the sale of composted manure from your farm could be included as on farm income under BC Assessment would you sell it? Yes ☐ No ☐

34. Is your manure storage area protected from rain? Yes ☐ No ☐

35. What pasture management techniques do you use? (Check all that apply) Rotational grazing ☐ Fertilizer application ☐ Irrigation ☐ Chain harrow ☐ Others__________________________

36. What is the present value of the buildings and equipment you use to keep your horses?
$______________________
37. Do you board other people's horses on your farm? Yes ☐ No ☐ If yes, how many?
____
38. Does the boarding represent more than ☐ or less than ☐ half the gross earnings from your horse operation?
39. Do you own a horse trailer? Yes ☐ No ☐
40. Do you own a truck? Yes ☐ No ☐
41. Do you operate any of the following? (Check all that apply)

Commercial boarding		Guest Ranch		Tack Store	
Training Stable Sport		Bed & Bale		Feed Store	
Training Stable Race		Commercial Hauling Company		Hay producer	
Therapeutic Riding Facility		Equine Veterinary Clinic		Breeding Farm	
Lesson Barn		Equine Rescue			

Section 4: About You

42. What are the first three characters of your postal code? _________________
43. How many people in your household are involved with horses? ___________
44. How many of these are: male_______ female________
45. What age range do they fall into? Please put a check mark for each member:
________ <18 ________19–25 ________26-35 ________36–45 _________46-55 _________55+
46. Please indicate the range of your total annual household income:
_________< $30,000 ________$30,000 - $60,000 ________ $60,000 – $100,000
_________>$100,000
47. Are you a certified official within a national association (including racing) i.e. GPEB /SC /AQHA / NRHA / Equestrian Canada / USEF? Yes ☐ No ☐ If yes please indicate level and card(s) held:
____
____
____
____
48. Do you coach/train? Yes ☐ No ☐ (If no, skip to question 50)
49. Are you a certified coach/trainer? Yes ☐ No ☐ If yes please indicate level of certification, discipline and by whom:
____
____
____
    49.i) Is training or coaching your primary source of income? Yes ☐ No ☐
    49.ii) Do you teach out of your own facility? Yes ☐ No ☐
    49.iii) Do you have school horses? Yes ☐ No ☐ If yes, how many? _____________
    49.iv) Do you have an indoor arena? Yes ☐ No☐
    49.v) Approximately how many hours per week do you coach/train? _______________
    49.vi) Do you travel to teach? Yes ☐ No ☐
50. What factors would influence your choice of riding instructor? Please choose the most important factor.

Certified ☐ Reputation ☐ Competition Results ☐ Location ☐ Other ☐
____

51. Do you or any members of your household volunteer for any of the following:
    Equine Rescue ☐ Horse Shows ☐ Riding Clubs☐ Therapeutic Riding Facilities ☐ Other ☐
    ____

    51.i) Approximately how many hours per year of volunteer work? __________

52. Do you or any members of your household visit BC Guest Ranches? Yes ☐ No ☐
53. Do you or any members of you household visit an out of province Guest Ranch? Yes ☐ No ☐
54. Do you or any members of your household camp in BC with your horse(s) for recreational activity? Yes ☐ No ☐
55. Do your horses go out of province for any of the following services?
    Training ☐ Competition☐ Boarding ☐ Breeding☐ Recreation ☐ Other ☐
    ____

    If yes, where do you go?
    ____

56. Please list any local, provincial, national or breed equine associations you or members of your household belong to:
    ____
    ____
    ____
    ____

57. Do you or your club have any formal land use agreements with public or private land managers Yes ☐ No☐
    If yes what area of BC____

    57.i) Please tell us the name of your club.
    ____

58. Are you an equine professional i.e. farrier, veterinarian, commercial hauler? Yes ☐ No ☐
    If yes, please indicate which profession:
    ____

Section 5: Your Turn

59. Please tell us if over the next five years you see your involvement with horses:
    Increasing ☐ Decreasing☐ Staying the same ☐

60. Please identify any problems or concerns that you feel limit the expansion of the industry in your sector. Please expand upon your answer in the written section below or identity any other concerns which may not be listed.

Costs		Economy	
Access to trails		Safety on roads/trails	
Urban Encroachment/Price of land		Tax structure	
Lack of public facilities for riding		Other (please define)	

Lack of private facilities for riding			

____
____
____
____
____
____

61. For the purposes of this study, the equine industry has been divided into the following five sectors. Please indicate which sector you **predominantly** operate in (i.e. amount of time devoted) by placing a '1' next to the relevant sector. If you are involved in other sectors, please click on them in order of the amount of time devoted to these other sectors.

Race (horses and owners involved in racing or horses as part of a breeding farm operation producing racehorses) ____

Sport (horses and owners involved in the Olympic equestrian sports (jumping, dressage, three-day eventing) and horses and owners involved in rodeo and reining events) ____________

Ranch/Work (horses used for work on ranches, forestry and commercial carriage driving) __________

Guide (horses involved in guide outfitting businesses) ____________

Recreation (all horses not included in the categories above) ____________

THANK YOU! For taking the time to answer this survey and assisting us in supporting the Equine Industry.

Premise Identification and Traceability

HCBC and the Ministry of Agriculture would like to inform you about Premise Identification as a component of livestock welfare. Biosecurity as well as emergency response and management are important issues facing horse owners.

Premises Identification involves allocation of a unique identifier to a legal land parcel whose geographical location has been adequately described. All information submitted is confidential and the information is only used in the event of an emergency. This map-based information is of great assistance for dealing with animal related emergencies, will allow for enhanced access and response for emergency services, and enable better control and prevention of disease outbreaks. It is a free and confidential service provided by the government of BC. Please consider using the free Premise ID program to help safeguard your livestock.

Please Return completed surveys to; Industry Survey c/o Ference & Co, 550-475 West Georgia Street, Vancouver, BC V6B 4M9.