Comparative Demographics of English and Western Intercollegiate Horse Shows Association Horses Used in Middle Tennessee

by

Hannah Price

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Thesis Committee:

Dr. Alyssa Logan, Thesis Director

Dr. John Vile, Thesis Committee Chair

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APPROVED:

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Dr. Alyssa Logan, Thesis Director

[Assistant Professor, School of Agriculture]

_____

Dr. John Vile, Thesis Committee Chair

[Dean, University Honors College]

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Abstract

Intercollegiate Horse Show Association (IHSA) competitions evaluate riders on body position and skills when riding a randomly drawn horse. This project assessed demographics of horses involved in collegiate equestrian programs and determined how these characteristics relate to success in IHSA competitions. During two IHSA competitions hosted by MTSU, horse body condition score (BCS), age, height, weight, use of riding aids, and points earned were assessed. The populations assessed were from a Hunter Seat competition and a Western competition, totaling 59 horses. Data were analyzed using a GLIMMIX procedure (SAS 9.4) with significance set at $P < 0.05$. Use of aids ($P = 0.63$ Hunter Seat, $P = 0.41$ Western) did not impact horse performance. Horse demographics such as age, BCS, height, and weight were only weakly correlated with performance ($r < 0.30$). Random draw in IHSA is proposed effective for rider-judged competitions, giving riders an opportunity to compete equally.

I: INTRODUCTION

Universities with competitive equestrian programs are part of the Intercollegiate Horse Show Association, IHSA. This organization consists of approximately four hundred colleges divided into eight zones and thirty-eight regions (*General Information*). The IHSA has competitions in both English and Western disciplines. While there are numerous disciplines that fall under the English and Western umbrellas, IHSA competitions consist of Western horsemanship, ranch riding, reining, hunter seat equitation on the flat, and equitation over fences. Competitions in IHSA are open to beginner and advanced riders. The shows are judged on the rider's ability, within their level of riding and showing experience. Judges evaluate a rider on overall body position, seat, and handling skills while performing numerous gaits. The shows are on a catch ride system, where the students draw a horse at random. Prior to each show, horses are divided into the levels they are best suited for at the owner's and coach's discretion, and their names are drawn for riders in that level. Western competition consists of horsemanship sections beginner, rookie, level 1, level 2 and open. Level 2 competitors can also compete in ranch riding, and open competitors can also compete in reining. Ranch riding and reining are scored on accomplishing a set pattern of various tasks, and not solely on rider position like horsemanship. Hunter Seat has equitation levels of introductory, pre-novice, novice, limit flat and fences, intermediate flat and fences, and open flat and fences. Both flat and fences classes are evaluated on rider position. In both Western and Hunter Seat, if a rider is in a division with additional skilled sections like over fences or reining, they do not have to show that specialty, they can choose to do just the rail class or both (*General Information*). The structure of IHSA competitions is a

unique form of showing meant to create a level playing field for students of varying backgrounds.

While IHSA competitions are judged on the rider, their riding ability can make the horse present as more or less skilled, so it is important that judges examine how a rider influences the horse's movement. For example, how a rider posts white trotting can influence the horse's movement. The trot is ideally a two-beat diagonal gait, with the opposite front and hind limb hitting the ground at the same time. Posting is the act of standing and sitting in the saddle in beat with the trot footfall, standing when one pair of legs move and sitting when the others do. Posting in English riding is shown to affect lateral balance, while also shifting the horse's weight to their hindquarters. This results in a better-balanced horse, a smoother gait, and better collection, which all display the ability of the rider. The presence of a rider also increases propulsive force in the limbs, more drastically in the forelimbs, meaning the horse is able to have better forward motion with less effort and continued ideal form (Back et al., *Performance in Equestrian Sports* 2001).

A rider's ability is shown to influence how the horse moves especially in a two-beat gait, meaning they can increase or decrease the quality of the gait (Clayton, 1994). Often, riders tend to favor one side or the other. This asymmetry can cause the horse to be off-rhythm and change the mechanics of its movement. One study determined a height difference in stirrup length can affect a horse's gait by changing thoracolumbar kinematics and create uneven loading laterally. In addition, long-term asymmetry could have lasting effects on the horse's movement (MacKechnie-Guire et al., 2020). Despite

the horse's skills not being assessed within the scope of IHSA shows, their presentation can reflect the abilities of the rider.

Another point of interest is researching if multiple riders affect a horse's training since they are being ridden by the most beginner as well as most advanced riders in IHSA competitions. Some horses can perform to the level of their rider, while others are specific in their cues and require a more sophisticated and experienced rider. Even though some horses can do it all, open level and beginner level horses are generally not the same. While some are able to be ridden by any skill level, for the sake of easing their workload, they are placed into the levels they are best suited for. A study on the age of a horse relative to the number of riders in the career of jumping horses found that the more riders a horse had, the less successful they were (Neumann et al., 2020). It was also found that horses were improving up to ten years old regardless of number of riders, and after that their success declined, though the rate of improvement and declination varied. It is worth considering, if a horse has a negative temperament, or is becoming unsuccessful as they age, it could contribute to having multiple homes and riders. Therefore, while multiple riders may contribute to less success, lack of achievement can in turn result in multiple riders. Regardless, this decline in skill with age could be problematic for IHSA competition as many of the horses have already had a career and are commonly above ten years of age. Horses age approximately three times as fast as humans and are considered senior over the age of 20 (Siard-Altman et al., 2020). A portion of IHSA horses are likely past their prime and fall into this senior category.

Horses used in collegiate riding programs are often in a second career in the later part of their life. Many university horses are donated or leased after having their own

successful careers in various disciplines. Programs like Middle Tennessee State University (MTSU) have a variety of horses from various backgrounds because their unique qualities and training can teach a rider, and prepare them for catch riding situations. Part of being a good tool for riders to learn from requires patience and intelligence from the horse. They are ridden by a wide variety of people with different skills, and a calm demeanor is beneficial for beginner riders.

The MTSU horse science program consists of 60% American Quarter Horses (QH). The QH is the most popular breed in the United States, with 2,490,935 registered in the American Quarter Horse Association (AQHA) as of 2021 (AQHA, 2021). Quarter horses have been noted for their success in a wide range of disciplines, and research has found that horses competing in Western Pleasure, Hunter Under Saddle, and Reining have significant differences in physical type due to years of specialized breeding. Reining type horses are overall smallest in size, while Hunter Under Saddle horses were the largest (Roth et al., 2021). Given the widespread skills and genetic variability of the QH, it is reasonable to consider they could be successful in IHSA programs, as many horses are ridden by both Western and Hunter Seat teams.

Thoroughbreds are also often considered when discussing equine athletes due to the large attraction and popularity of the racing industry. There are Thoroughbred and QH crosses, referred to as an "Appendix," that can be registered with AQHA. These crosses have had a great impact on the QH breed, especially the Thoroughbred sire Three Bars who influenced many disciplines in the QH world. The Thoroughbred is an athletic breed, and it's genetics improved the QH breed (Petersen et al., 2013).

For horses to be successful in their designated disciplines, there are common physiological factors. A significant point that many consider important is the horse's conformation. Essentially, conformation is how close the horse's body structure is to the ideal, taking into account structural build, muscling, and overall desirability of their physical appearance. The process of assessing conformation can be quite simple or very extensive, depending on the level of requirements put on looking like the ideal of the given breed or discipline (Back et al., *The effects of conformation* 2001). For example, in show jumping, height at the withers is most connected with achievement, as well as innate ability (Back et al., *Performance in Equestrian Sports* 2001). While conformation standards can vary by breed, the basics of what makes an ideal-appearing horse are generally universal. Conformation is not always correlated with performance and soundness, but it may be influential. Skeletal structure can influence gait quality based on shoulder angles, hip angles, and other joint angles (Back et al., *The effects of conformation* 2001). In the AQHA, there are halter classes dedicated to assessing conformation. This association rulebook states major and minor faults in conformation related to balance, structural correctness, muscling, and eye appeal (American Quarter Horse Association). Although conformation can be influential for the maximum potential of a horse's skills, it is not the sole factor which dictates success.

Certain basic training is required for a horse to excel in their discipline. A well-trained horse has the ability to change their length of stride and shape of their body. Training develops the hindquarters in a way that allows for more efficiency of movement, impulsion, strength, and balance. A shorter stride and higher stride frequency along with more propulsion from the hind end results in a more collected gait and better self-

carriage. At higher levels of training, horses will be pushing themselves forward from their hind end rather than pulling with their front end. Horses carry uneven weight distribution: about 60% of body weight on the front legs 40% on the hind (Back et al., *Performance in Equestrian Sports* 2001).

Participation in equestrian programs can be a large commitment for students, especially when showing is involved. Researchers at University of Nebraska-Lincoln collected information on their equestrian team participants and found that overall, student involvement in riding programs and IHSA competition was a positive experience, despite the time, finances, and hard work devoted to the team. The study also found that Equine Science majors who were part of the team felt there was a positive impact on their education, and involvement helped their academics (Anderson & Karr-Lilienthal, 2011). Collegiate equestrian programs are an important tool for the new generation of equestrians to learn and grow within the horse industry. However, the research on the equine participants in collegiate equine programs is limited.

II: THESIS STATEMENT

The aim of the project was to assess the demographics of horses involved in collegiate equestrian programs by evaluating those represented in IHSA competitions, and determine how their characteristics, such as size or age, may correlate to their success in IHSA competitions. Findings from this study will aid in making recommendations as to which types of horses would be successful candidates to be used in a collegiate riding program competing in IHSA.

III: METHODOLOGY

This research was approved by the Institutional Animal Care and Use Committee at Middle Tennessee State University (IACUC 2023-0020).

Horse Demographics

In partnership with IHSA competitions hosted by the MTSU Horse Science Program and Equestrian Team at the Tennessee Miller Coliseum, data was collected from two different shows being hosted by MTSU, a Hunter Seat and a Western competition. Horses were evaluated between disciplines, as well as assessed by overall horse demographics in both shows. Each show was two days long, and horses were provided by multiple universities and owners. The horses used for competitions were assessed through Body Condition Score (BCS), age, breed, height and weight measurements, and performance during competitions. Demographic information of age and breed was retrieved from each horse's owner.

Body condition score was measured by inspecting six specific body regions, the neck, withers, shoulder, ribs, back, and tailhead, to assess fat deposits and determine the approximate health of the horse based on its physical appearance. Body condition is scored with whole numbers on a scale from one, emaciated, to nine, critically overweight (Henneke, 1984). If a more specific BCS is needed, it can be estimated with half points if the horse appears between two scores. Two trained individuals assessed the BCS for each horse, and an average of the scores given was used in the results.

Height and weight were measured using a height measuring stick (Figure 1) and an equine weight measurement tape (Figure 2A and 2B). The height stick was placed at

the highest point of the wither, and then a tape measure was lined up with the height stick to get a height measurement in centimeters.

Figure 1: Example of height measurement method

The equine weight measurement tape was wrapped around the barrel of the horse, over the withers and around the heart girth. The number on the tape where the edges meet gives an approximate weight measurement.

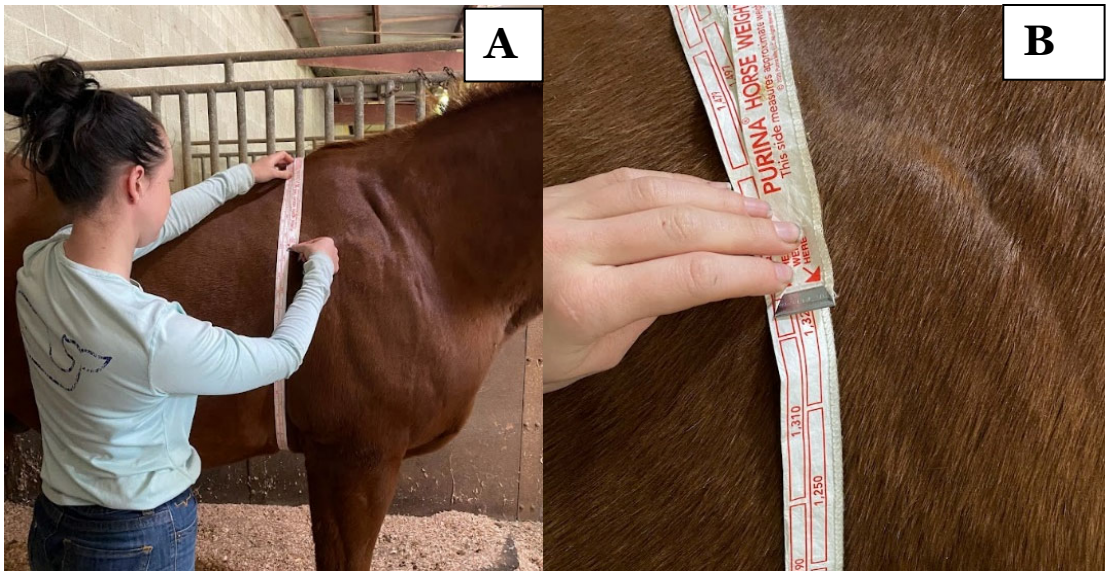

Figure 2: (A) Example of weight measurement method. (B) Example of weight measurement.

Horse Performance

Horse performance in shows was assessed by assigning points to each placing a horse could receive. During the show, the researchers recorded the placings of each horse first through sixth, while also noting aids used, 1st received 7 points, 2nd received 5 points, then 4, 3, 2, and 1 point consecutively for lower placings through 6th. Any placing below sixth did not receive any points and was not recorded. This point system was valued the same as how riders are officially scored in IHSA competitions. Total points were added together at the conclusion of each day of competition and then divided by the number of times each horse was ridden, to calculate points per ride.

Aid use is a predetermined option discussed by the horse provider and the show committee. Riders and their coach may decide to take the option for aid use or go without. Hunter seat riders can use a crop at any level and spur Novice and above, and

even if a crop is carried it is not always utilized. Western riders can use a ball spur in Rookie B and above, while rowel spurs are reserved only for the Open level.

Horses were also noted if they had a specialty within the show, meaning they were used in reining, ranch riding, or were ridden over fences. Specialty skill horses do not always participate in non-specialty classes, but some horses do. During each show, classes begin at the specialty classes and Open level, then work down through the levels and end with Beginner/Introductory levels.

Statistical analysis

Data were analyzed using SAS (9.4 SAS Stat. Inc. Cary, NC). The MIXED procedure was utilized to evaluate fixed effects of day, specialty, aids, discipline, and breed on points acquired by horses. Pearson's correlation coefficients were used to evaluate relationships between horse age, horse BCS, horse height, horse weight, number of rides, points, and points per ride. P-values of $P < 0.05$ were considered significant, while $0.05 < P < 0.10$ was considered a trend. Correlation coefficients were interpreted as follows: $r > 0.90$ very strong, $0.70 < r < 0.90$ strong, $0.50 < r < 0.70$ moderate, $0.50 < r < 0.30$, weak $r < 0.30$ weak. The FREQ procedure was used to evaluate breeds used. Data are presented as means ± standard deviation.

IV: RESULTS

The horses assessed consisted of 30 Hunter Seat and 34 Western, with five horses being used in both shows, for a total of 59 horses studied. Each show was two days long, and horses were provided by a variety of schools and owners.

Horse demographics

In the Hunter Seat show, horse ages ranged from 9-25 years old. The Western show was comprised of ages 6-26 years old. Age and BCS did not differ between Hunter Seat and Western horses (P = 0.16 and 0.20, respectively). However, Hunter Seat horses had greater height and weight than Western horses (P < 0.001 and P < 0.001, respectively).

Table 1: Horse age, height, weight, and BCS for both Hunter Seat and Western horses.

	Age	Height (cm)	Weight (cm)	BCS
Hunter Seat	16 ± 4	169[a] ± 11	587[a] ± 41	5.5 ± 1
Western	17 ± 5	156[b] ± 9	556[b] ± 51	5.5 ± 1
P - Value	0.16	< 0.001	< 0.001	0.20

[a,b] Means lacking common superscript within a column differ between Hunter Seat and Western shows (P < 0.001).

The breed distribution in the Hunter seat show was mostly Quarter Horse/Appendix, Thoroughbred, and Warmblood (Table 2). In the Western show, Quarter Horse/Appendix was the breed used in most frequency (Table 3).

Table 2: Breed frequency of horses used in the Western show.

Breed	**Frequency**
Arabian	9%
Paint Horse	9%
Quarter Horse/Appendix	79%
POA	3%

Table 3: Breed frequency of horses used in the Hunter Seat show.

Breed	Frequency
Arabian	3%
Paint Horse	7%
Quarter Horse/ Appendix	33%
Thoroughbred	27%
Warmblood	23%
Appaloosa	3%
Grade	3%

Performance

Discipline had an effect on the number of points a horse earned, with Hunter Seat horses acquiring more points ($P < 0.0001$, Table 4). Hunter seat horses also averaged more rides within a day compared to Western horses ($P < 0.0001$, Table 4). Day did not affect the number of rides, and there was no interaction between day and discipline ($P = 0.20$, $P = 0.51$, respectively). Points per ride were not different between disciplines ($P = 0.57$) or days ($P = 0.47$), with horses averaging 3 ± 2 points per ride.

Table 4: Average amount of points and rides for each horse on each show days 1 and 2, by discipline.

	Rides	Points
Hunter Seat	$4^{a} \pm 1$	$11^{a} \pm 5$
Western	$3^{b} \pm 1$	$7^{b} \pm 5$
P-Value	< 0.0001	< 0.0001

[a,b] Means lacking common superscript differ between Hunter Seat and Western shows ($P < 0.001$).

Age, ($r = -0.10$, $P = 0.60$), BCS ($r = 0.15$, $P = 0.42$), height ($r = 0.20$, $P = 0.28$), and weight ($r = 0.23$, $P = 0.23$) had weak correlations with amount of points earned for

Hunter Seat horses. Western horses also had weak correlations of age ($r = 0.02$, $P = 0.90$), BCS ($r = 0.17$, $P = 0.34$), height ($r = 0.15$, $P = 0.39$), and weight ($r = 0.20$, $P = 0.25$) to points earned. Points were strongly correlated with the amount of rides a horse was used for in a show day ($r = 0.72$, $P = 0.0002$), regardless of discipline.

For English horses, neither the use of aids (crop or spur) or the horse having a specialty (fences classes), had an effect of the number of points per ride a horse acquired ($P = 0.54$ and $P = 0.50$, respectively). Similarly, for western horses, neither the use of aids (spur) or the horse having a specialty (reining or ranch riding), affected the number of points the horse acquired ($P = 0.94$ and $P = 0.61$, respectively). Breed did not impact the number of points per ride a horse acquired regardless of discipline ($P = 0.30$ Hunter Seat, $P = 0.73$ Western).

V: DISCUSSION

The data collected suggests the evaluated horse demographic factors do not impact a horse's performance through acquirement of points in an IHSA show. Factors outside the measured demographics may impact horse performance in IHSA contests. Horse training levels and previous show experience were not evaluated in this study but may play a role in horse success (Neumann et al., 2020).

One significant correlation found was between height and weight. Weight relates closely to height, given the taller a horse is, the more body mass it would have. Hunter Seat horses were found to have greater average height and weight. This is consistent with other findings that Hunter Seat type horses have a larger overall body size and mass than Western type horses (Roth et al., 2021).

Body Condition Score for all horses evaluated was within a healthy range and was not different between disciplines. Although it is not a perfect indicator of health, a horse below a three, or above an eight, will generally have health issues either as a result of, or in combination with their weight (Henneke et al., 1984). Athletic horse BCS should fall between four and six for peak performance, though the discipline will affect this. For example, racehorses are slimmer while other working horses are frequently on the higher end of the scale (Hinchcliff et al., 2008). Each horse carries their weight differently, so it is important that each of the six body regions are given an individual score, and an average is used for the overall assessment of body condition.

Aid use was not found to have a significant impact on horse performance in either discipline. Prior to each show, horse providers must determine and provide a description of each horse's aid needs. Crop use in Hunter Seat must be designated by the horse owner, and use of the crop prior to entering the ring or improper use during showing may result in disqualification. Spurs in Hunter Seat are the responsibility of the horse provider to decide the need of use and supply the appropriate spurs for divisions Novice and above. Western ball spurs are permitted Rookie B and above, rowel spurs are only permitted in the Open level. Similar to Hunter Seat, it is up to the horse provider to determine if spurs are necessary; however, it is up to the rider to provide their own spur, should it be necessary (IHSA). While a horse may be listed as permitted to be ridden with aids, it is up to the rider and their coach to decide if aid use would be beneficial. It is also at the discretion of the coach to allow the rider to use any recommended aids. Inability to use an aid may be viewed as a disadvantage by the rider, as it may be more difficult to achieve the required gaits and maneuvers, all while maintaining correct body position.

Data collected indicates that aid use did not affect performance via the achievement of points.

Since college programs are a second career for many horses, it is reasonable that the population will be made up of older horses, closer to retirement age. The window of retirement for horses varies based on their work experience, but horses over 20 are considered senior (Siard-Altman et al., 2020). Retirement age may be related to length of career. For example, horses may retire younger if they have a more successful career early in life. This can be difficult to track since lesson horses may come from diverse backgrounds. The variety in retirement standards contributes to a wide age range in IHSA horses. In this study, the average age was similar between disciplines and confirms an older age range for the study population.

It was predicted that Quarter Horses would make up a majority of the breed distribution across both disciplines given the versatility of the breed. This was found in the Western shows, while the Hunter Seat shows had almost equal numbers of Quarter Horses, Thoroughbreds, and Warmbloods. These other breeds are suitable, as they tend to have a larger stature, and bigger size is a common body type for English disciplines, such as Hunter Seat (Roth et al., 2021).

Hunter Seat horses acquired more points, and were ridden more during each show, however average points per ride was consistent across both shows. This suggests that even as horses are ridden more, performance stays consistent. During the course of a show, classes go in order from the specialty classes and Open level down to the Beginner/Introductory level. This means that even horses that are used across all levels

are being asked to do the most work at the beginning of the show. This allows horses to do less-specialized work as the day goes on and they may get more tired.

In order to expand upon these results, evaluation of IHSA programs should be continued at a national level. The data collected was limited by the size of the shows and the horses available from the schools and owners involved. Horses that are removed from the show for a variety of reasons, such as lameness or poor behavior, decreased the number studied. Additionally, on day 2 of the Western show, there was an extra split of the Rookie B division. Classes are generally split at 24 riders, to create two classes of 12, which was the case for day 1. The second day had 26 riders, so the division was split into three classes of 9, 9, and 8 riders. Due to this extra split, Rookie level horses had more rides, and more horses were placed. Day 1 had 12 placings while day 2 had 18 placings, therefore more horses received points. Despite this change, day did not impact points per ride achieved in either discipline. Horse training level and showing experience in IHSA or otherwise were not evaluated. Such factors could impact performance and should be evaluated in continued studies (Neumann et al., 2020). Specialty horses require extra training in order to achieve those specific skills, and effects of training and previous showing experience may be different between specialty and non-specialty horses.

Overall, the horse demographics examined in this study were not found to impact measured horse performance, aligning with the goals of draw-system showing, such as the Intercollegiate Horse Shows Association. Future studies should evaluate the prior training and showing experiences of horses involved in draw-system events to consider their impacts on performance measures.

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VII: APPENDICES

Henneke's body condition scoring system chart.

DATE:_____

NAME:_____

FREEZEMARK:_____

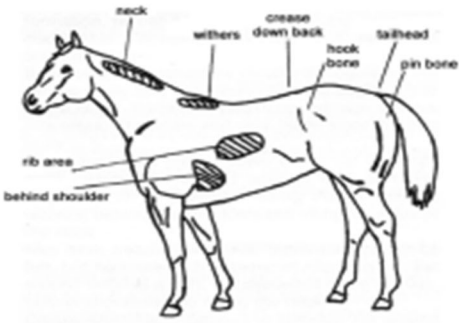
SIGNALMENT KEY:_____

HOOF CONDITION:_____

COMMENTS: _____

_____

OVERALL HENNEKE BODY CONDITION SCORE: ☐



modified from Henneke et al. EVJ 1983;15:371-372

Condition	Neck	Withers	Shoulder	Ribs	Back	Tailhead Area
1 Poor (*extremely emaciated*)	Bone structure easily noticeable	Bone structure easily noticeable	Bone structure easily noticeable	Ribs projecting prominently	Spinous processes projecting prominently	Tailhead, pinbones, and hook bones projecting prominently
	No fatty tissue can be felt					
2 Very Thin (*emaciated*)	Bone structure faintly discernible	Bone structure faintly discernible	Bone structure faintly discernible	Ribs prominent	Slight fat covering over base of spinous processes. Transverse processes of lumbar vertebrae feel rounded. Spinous processes are prominent	Tailhead prominent Pin bones prominent Hook bones prominent
3 Thin	Neck accentuated	Withers accentuated	Shoulder accentuated	Slight fat over over ribs. Ribs easily discernible	Fat buildup halfway on spinous processes, but easily discernible. Traverse processes cannot be felt	Tailhead prominent but individual vertebrae cannot be visually identified. Hook bones appear rounded, but are still easily discernible. Pin bones not distinguishable
4 Moderately Thin	Neck not obviously thin	Withers not obviously thin	Shoulder not obviously thin	Faint outline of ribs discernible	Negative crease (peaked appearance) along back	Prominence depends on conformation. Fat can be felt. Hook bones not discernible
5 Moderate	Neck blends smoothly into body	Withers rounded over spinous processes	Shoulder blends smoothly into body	Ribs cannot be visually distinguished, but can be easily felt	Back is level	Fat around tailhead beginning to feel spongy
6 Moderately Fleshy	Fat beginning to be deposited	Fat beginning to be deposited	Fat beginning to be deposited behind shoulder	Fat over ribs feels spongy	May have a slight positive crease (a groove) down back	Fat around tailhead feels soft
7 Fleshy	Fat deposited along neck	Fat deposited along withers	Fat deposited behind shoulder	Individual ribs can be felt, but noticeable fat filling between ribs	May have a positive crease down the back	Fat around tailhead is soft
8 Fat	Noticeable thickening of neck	Area along withers filled with fat	Area behind shoulder filled with fat	Difficult to feel ribs	Positive crease down the back	Fat around tailhead very soft
9 Extremely Fat	Bulging fat	Bulging fat	Bulging fat	Patchy fat appearing over ribs	Obvious crease down the back Flank filled with fat	Bulging fat around tailhead

Henneke Equine Body Scoring Chart 1_18_07.xls

IACUC approval letter

IACUC
INSTITUTIONAL ANIMAL CARE and USE COMMITEE
Office of Research Compliance,
010A Sam Ingram Building,
2269 Middle Tennessee Blvd
Murfreesboro, TN 37129

MIDDLE TENNESSEE STATE UNIVERSITY

IACUCN006: DMR PROTOCOL APPROVAL NOTICE

Date of original notice: Thursday, February 9, 2023

Senior Investigator	**Alyssa Logan** (ROLE: Principal Investigator)
Co-Investigators	Hannah Price (student)
Investigator Email(s)	hap3c@mtmail.mtsu.edu; alyssa.logan@mtsu.edu
Department	School of Agriculture
Protocol Title	*Comparative demographics of English and Western IHSA horses used in Middle Tennessee*
Protocol ID	**23-002**
Funding	None

Dear Dr. Logan and Hannah Price,

The MTSU Institutional Animal Care and Use Committee has reviewed the animal use proposal identified above under the ***Designated Member Review (DMR) mechanism***. The IACUC has determined that your animal use protocol meets the guidelines for approval in accordance with PHS policy. A summary of the IACUC action(s) and other particulars of this this protocol are tabulated below:

IACUC Action	**APPROVED for one year**	
Date of Expiration	**2/10/2024**	
Number of Animals	WESTERN (30); Hunt-Seat (40)	
Approved Species	***Equine***	
Category	☐ **Teaching**	☒ **Research**
Subclassifications	☐ Classroom ☐ Laboratory	☒ Laboratory ☐ Field Research ☐ Field Study ☒ Handling/Manipulation ☐ Observation
	Comment: NONE	
Approved Site(s)	MTSU Horse Science Center	
Restrictions	**1. Must comply with all IACUC requirements;** **2. Mandatory compliance with CDC guidelines during COVID-19; Social distancing guidelines are made by the Dean of CBAS.** **3. The PI must make alternative plans to ensure proper animal care, including euthanasia if needed, in the event the research team is quarantined due to COVID19**	
Comments	NONE	

This protocol expires on **2/10/2024** and it can be extended for THREE years until **2/10/2026** by requesting a continuing review by submitting annual progress reports. The investigator(s) MUST file a Progress Report annually updating the status of this study. Refer to the schedule for Continuing Review shown below; NO REMINDERS WILL BE SENT. A continuation request (progress report) must be **approved** by the IACUC prior to **2/10/2024** for this protocol to be active for its full term. Once a protocol has expired, it cannot be continued and the investigators must request a fresh protocol.

Continuing Review Schedule:

Reporting Period	Requisition Deadline	IACUC Comments
First year report	2/10/2024	NONE
Second year report	2/10/2025	NONE
Final report	2/10/2026	NONE

Post-approval Amendments:

Date	*Amendment*	*IACUC Notes*
NONE	NONE	NONE

Post-approval Actions:

Date	*Amendment*	*IACUC Notes*
NONE	NONE	NONE

MTSU Policy defines an investigator as someone who has contact with live or dead animals for research or teaching purposes. Anyone meeting this definition must be listed on your protocol and must complete appropriate training through the CITI program. Addition of investigators requires submission of an Addendum request to the Office of Research Compliance.

The IACUC must be notified of any proposed protocol changes prior to their implementation. Unanticipated harms to subjects or adverse events must be reported within 48 hours to the Office of Compliance at (615) 494-8918 and by email – compliance@mtsu.edu.

All records pertaining to the animal care be retained by the MTSU faculty in charge for at least three (3) years AFTER the study is completed. In addition, refer to MTSU Policy 129: Records retention & Disposal (https://www.mtsu.edu/policies/general/129.php) for Tennessee State requirements for data retention. Please be advised that all IACUC approved protocols are subject to audit at any time and all animal facilities are subject to inspections at least biannually. Furthermore, IACUC reserves the right to change, revoke or modify this approval without prior notice.

Sincerely,

Compliance Office
(On behalf of IACUC)
Middle Tennessee State University
Tel: 615 494 8918
Email: iacuc_information@mtsu.edu (for questions) and
iacuc_submissions@mtsu.edu (for sending documents)

Consent Form presented to horse owners.

Consent to participate in collegiate contest equine demographic study

Middle Tennessee State University, and other universities/colleges across the United States participate in IHSA (https://www.ihsainc.com/about-us/general-information) competitions. In these contests, equestrians compete with other equestrians from other universities. The large appeal for competing with this association is the collegiality in a typically independent sport, but also that competitors do not ride their own horses. Instead, hosting universities provide horses for contestants to compete on. This eliminates the expense of horse ownership for collegiate competitors. Currently, IHSA encompasses 40 Regions in 8 Zones with over 400 member colleges across 45 states, as well as Canada, totaling 10,000 members. While there are notable statistics encompassing student involvement in IHSA, little evaluation has been completed to consider the types of horses involved in IHSA contests, particularly in the Middle Tennessee area. The researchers propose to record and evaluate the demographics of the equines used in both Hunt Seat and Western IHSA shows hosted by MTSU at the Tennessee Miller Coliseum. The Hunt Seat show will be hosted February 11th and 12th and the Western show will be hosted February 17th and 18th. During this contest, researchers will collect the following information on each horse that is volunteered for use in the contest: age, breed, sex, and body condition score. No procedures outside of normal equine handling and measurements will be performed on the animals. Researchers will collect demographic data and body condition scores on all horses involved in both the Western IHSA and Hunt Seat IHSA competitions.

Research Procedures: Researchers will request demographic information about your horse, such as the age, breed, and sex. Three trained researchers will perform body condition scoring using the Henneke system. Body condition scoring requires palpation of the neck, withers, loin, tailhead, ribs, and shoulder. The height and weight of your horses will also be recorded with a weight tape and measurement stick.

Benefits to you: At no cost to you, your horse will get a body condition score evaluation by trained researchers.

Costs: The only costs associated with participation is travel from your horse's place of residence to the Tennessee Miller Coliseum.

Please note that participation is voluntary. Refusal to participate will involve no penalty or loss of benefits to which the owner is otherwise entitled and that the owner may discontinue participation at any time without penalty or loss of benefits to which the owner/patient is otherwise entitled.

We ask you to recognize that we intend to keep your animal as safe as possible and free of danger or injury. However, please keep in mind that horses can be unpredictable animals and involvement in this research may increase risk to the horse or handler which is completely unforeseeable.

For any questions regarding this research and your horse's involvement feel free to contact the Principal Investigator Dr. Alyssa Logan (alyssa.logan@mtsu.edu).

Name of horse owner:_____

Name of horse(s): _____

Signature of horse owner:_____

Date:_____