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An Analysis of Factors Responsible for the Decline of the U.S. Horse Industry: Why Horse Slaughter is not the Solution

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AN ANALYSIS OF FACTORS RESPONSIBLE FOR THE DECLINE OF THE U.S. HORSE INDUSTRY: WHY HORSE SLAUGHTER IS NOT THE SOLUTION

JOHN HOLLAND AND LAURA ALLEN*

I. INTRODUCTION

Like the U.S. economy, the U.S. horse industry has experienced a significant economic decline in recent years. The American Horse Council Foundation performed a comprehensive study of the U.S. horse industry in 2005, and detailed the industry’s economic impact on the overall U.S. economy. The study estimated that two million people owned horses, the direct annual economic impact of the industry was $39 billion, and the total economic impact was $102 billion. Since that study, there has been no equivalent comprehensive examination of the industry, but available data, such as foal registrations, indicate that the industry has suffered a major and prolonged downturn. Some have suggested that the decline in the horse industry and in domestic horse ownership is due to the ban on slaughtering horses in the U.S. In fact, the ban on horse slaughter has not caused this decline.

This article first reviews some of the state and federal laws that ended horse slaughter in the U.S. Next, this article discusses the real factors causing the decline in the domestic horse industry, such as increased feed and fuel costs. Lastly, the article explains that the real problem facing the horse industry is the allocation of the various resources that impact costs and government programs that significantly influence the allocation of

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2 Id.


these resources. Consequently, turning back the clock to allow domestic horse slaughter will not save the horse industry.

II. THE LAW ON HORSE SLAUGHTER IN THE U.S.

In 2007, the commercial slaughter of horses in the U.S. for human consumption ended following a complex combination of state and local legislation, and court rulings that culminated in Congress defunding ante-mortem inspections. This shut down the three commercial facilities that had been slaughtering horses for human consumption before 2007. No facility for the slaughter of horses for human consumption has operated since then in the U.S.

A. Federal Regulation

The legislative actions that led to the shutdown began with the Agriculture, Rural Development, Food and Drug Administration, and Related Appropriations Act, which became law on November 10, 2005 and contained a provision that defunded ante-mortem inspections of equines. The Federal Meat Inspection Act (FMIA) requires ante-mortem inspection of animals to be slaughtered for human consumption. Without the required inspections, animals cannot legally be slaughtered for human consumption. Beginning 120 days after the enactment of the 2005 Act, none of the funds made available through this Act could be used to pay the salaries or expenses of personnel that inspected horses destined for slaughter.

The U.S. horse slaughter industry took swift action in response to the defunding. Beltex Corp., owned by Belgian Multimeats NV, and Dallas Crown, Inc., owned by Belgian Chevidico NV, operated horse slaughter facilities located in Fort Worth and Kaufman, Texas respectively.

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6 LINDA SHAMES ET. AL., U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-11-228, HORSE WELFARE: ACTION NEEDED TO ADDRESS UNINTENDED CONSEQUENCES FROM CESSATION OF DOMESTIC SLAUGHTER 2-3 (June 2011) [hereinafter GAO REPORT].
7 Id.
International, Inc., owned by Belgian Velda NV, operated the facility in DeKalb, Illinois. Beltex also owns Empacadora de Carnes de Fresnillo, S.A. de C.V., a Mexican corporation which processes horsemeat for human consumption and then exports it through Texas. On November 23, 2005, the owners of the three domestic slaughterhouses filed a petition for emergency rulemaking with the U.S. Department of Agriculture (USDA), requesting that the USDA allow the companies to pay for the inspections. On February 8, 2006, the USDA issued an interim final regulation stating that an official establishment that wishes to slaughter horses may apply for and obtain inspections if they pay for them. The rule was to become effective on March 10, 2006, the same date the aforementioned appropriations act that defunded ante-mortem inspections was scheduled to take effect.

This fee-for-service ante-mortem horse slaughter inspection system was challenged by a number of animal welfare organizations and individuals who filed an action in the U.S. District Court for the District of Columbia. The owners of the three domestic horse slaughter facilities intervened in the action, and on March 28, 2007, the District Court granted summary judgment to the plaintiffs. The court vacated the regulation and enjoined the USDA’s Food Safety and Inspection Service (FSIS) from implementing it. The court found that the USDA had violated the Administrative Procedure Act (APA) and the National Environmental Policy Act (NEPA) by failing to consider the potential environmental impact of its action in issuing the regulation. However, the court noted that no party disputed that horse slaughter operations significantly impacted the environment within the meaning of NEPA. On May 1, 2007, the D.C. Circuit Court of Appeals granted an emergency stay in a 2-1 decision to allow Cavel International, Inc. to continue operating pending appeal.
B. Texas State Law

The two Texas horse slaughter facilities did not join the request for an emergency stay because a Fifth Circuit Court of Appeals decision issued on January 19, 2007 had already shuttered those facilities. This decision was a long time coming. In 2002, the Texas slaughterhouses were under threat of criminal prosecution by the District Attorneys for Kaufman and Tarrant Counties, the counties where the slaughter facilities were located. The slaughterhouses feared being prosecuted under a 1949 Texas law that, in pertinent part, banned any person from "sell[ing], offer[ing] for sale, or exhibit[ing] for sale horsemeat as food for human consumption" or "possess[ing] horsemeat with the intent to sell the horsemeat as food for human consumption." Additionally, the 1949 Texas law prohibited the transfer of horsemeat to a person whom the transferor knows or should know intends to engage in those prohibited activities.

In an August 2002 opinion, the Texas Attorney General argued that the 1949 Texas law, which purports to "prohibit[] the processing, sale or transfer of horsemeat for human consumption," is applicable to Texas slaughter houses. On September 26, 2002, Empacadora De Carnes De Fresnillo, S.A. de C.V., Beltex Corp., and Dallas Crown filed a complaint in the U.S. District Court for the Northern District of Texas requesting an injunction prohibiting the Kaufman and Tarrant County District Attorneys from enforcing this law. While the District Court enjoined enforcement of the law, the Fifth Circuit Court of Appeals overturned this decision. The Fifth Circuit rejected the lower court's finding that the Texas Meat and Poultry Inspection Act (TMPIA) had repealed the state anti-horse slaughter law. The court stated the TMPIA did not repeal the Texas anti-horse slaughter law because the anti-horse slaughter law was codified after the TMPIA, and the court found the TMPIA never legalized sale or slaughtering of horses for human consumption. In fact, the "TMPIA is

25 See Empacadora de Carnes de Fresnillo, S.A. de C.V. v. Curry (Empacadora de Carnes), 476 F.3d 326, 337 (5th Cir. 2007) cert. denied 550 U.S. 957 (2007) (finding the Texas anti-horse slaughter law constitutional and allowing District Attorney to prosecute the slaughter houses, who had already admitted to violating the law in question).
29 Empacadora de Carnes, 476 F.3d at 329.
31 Empacadora de Carnes, 476 F.3d at 328-29.
32 Id. at 330.
33 Id.
34 Id. at 330-31.
indifferent as to which meats are legal for public sale, but provides general regulations that may be applied to those that are.\textsuperscript{35} The Fifth Circuit further rejected the District Court’s finding that the FMIA preempts the Texas anti-horse slaughter law.\textsuperscript{36} The court was adamant, stating: "[w]e can find no indication that Congress intended to prevent states from regulating the types of meat that can be sold for human consumption."\textsuperscript{37} The court found the FMIA had a limited reach and was not inconsistent with the 1949 law.\textsuperscript{38}

The Fifth Circuit also found that enforcing the 1949 law did not violate the Dormant Commerce Clause.\textsuperscript{39} The court said that this law "does not favor local industry, place excessive burdens on out-of-state industry, and no alternative measures could advance Texas' interests as effectively."\textsuperscript{40} The court identified Texas' interests as "(1) preserving horses, (2) preventing the consumption of horsemeat, and (3) preventing horse theft."\textsuperscript{41} Curiously, while the Court accepted that preventing the consumption of horsemeat was one of Texas' interests, the court also observed that none of the horse meat is sold domestically for human consumption.\textsuperscript{42}

In an opinion dated May 6, 2008, the Texas Attorney General extended the interpretation of the Texas anti-horse slaughter law, stating that the law would be upheld against similar challenges in the case of a foreign corporation transporting horsemeat for human consumption in-bond through Texas for immediate export abroad.\textsuperscript{43}

\textit{C. Illinois State Law}

Texas is not the only state to have banned the sale or slaughter of horses for human consumption for a significant period of time. Other states, such as California,\textsuperscript{44} Mississippi,\textsuperscript{45} and Oklahoma,\textsuperscript{46} have longstanding bans

\textsuperscript{35} Id. at 331.  
\textsuperscript{36} Id. at 335.  
\textsuperscript{37} Id. at 333.  
\textsuperscript{38} See id. at 334.  
\textsuperscript{39} Id. at 336.  
\textsuperscript{40} Id. at 336-37.  
\textsuperscript{41} Id. at 336.  
\textsuperscript{42} Id. at 329.  
\textsuperscript{44} See CAL. PENAL CODE § 598c (West 2013) ("[i]t is unlawful for any person to possess, to import into or export from the state, or to sell, buy, give away, hold, or accept any horse with intent of killing, or having another kill, that horse, if that person knows or should have known that any part of that horse will be used for human consumption.").  
\textsuperscript{45} MISS. CODE ANN. § 75-3-3 (West 2013) ("The term 'food unfit for human consumption' shall be construed to include meat and meat-food products of horses and mules . . . ").  
\textsuperscript{46} See OKLA. STAT. ANN. tit. 63, § 1-1136 (West 2013) ("It shall be unlawful for any person to sell, offer or exhibit for sale . . . any quantity of horsemeat for human consumption.").
on the sale or transfer of horses for human consumption. Illinois, on the other hand, has only recently joined the group of states maintaining a ban.\textsuperscript{47} In 2007, Illinois enacted an amendment to the Illinois Horse Meat Act that made slaughter of horses for human consumption illegal.\textsuperscript{48}

The Illinois slaughterhouse, owned by Cavel International, Inc., challenged the new law in the U.S. District Court for the Northern District of Illinois. According to Cavel, the Illinois ban was preempted by FMIA and violated the Commerce Clause.\textsuperscript{49} The District Court refused to enjoin the horse slaughter ban, a decision that was affirmed by the Seventh Circuit.\textsuperscript{50} The Seventh Circuit clearly indicated that Illinois had an interest in banning horse slaughter for human consumption that could be vindicated through legislation:

Cavel argues...that Illinois's ban on slaughtering horses for human consumption serves no purpose at all. The horses will be killed anyway when they are too old to be useful and what difference does it make whether they are eaten by people or by cats and dogs? But the horse meat used in pet food is produced by rendering plants from carcasses rather than by the slaughter of horses, and the difference bears on the effect of the Illinois statute. Cavel pays for horses; rendering plants do not. If your horse dies, or if you have it euthanized, you must pay to have it hauled to the rendering plant, and you must also pay to have it euthanized if it didn't just die on you. So when your horse is no longer useful to you, you have a choice between selling it for slaughter and either keeping it until it dies or having it killed. The option of selling the animal for slaughter is thus financially more advantageous to the owner, and this makes it likely that many horses (remember that Cavel slaughters between 40,000 and 60,000 a year) die sooner than they otherwise would because they can be killed for

\textsuperscript{47} Cavel Int'l, Inc. v. Madigan, 500 F.3d 551, 553 (7th Cir. 2007) cert. denied 2008 U.S. LEXIS 4938 (June 16, 2008)("Prior to the [2007] amendment, the statute merely required a license to slaughter horses and imposed various inspection, labeling, and other regulatory restrictions on licensees.").

\textsuperscript{48} 225 Ill. Comp. Stat. Ann. 635/1.5 (West 2012) (effective May 24, 2007) ("(a) Notwithstanding any other provision of law, it is unlawful for any person to slaughter a horse if that person knows or should know that any of the horse meat will be used for human consumption. (b) Notwithstanding any other provision of law, it is unlawful for any person to possess, to import into or export from this State, or to sell, buy, give away, hold, or accept any horse meat if that person knows or should know that the horse meat will be used for human consumption.").

\textsuperscript{49} See Cavel Int'l, Inc. v. Madigan, 500 F.3d at 553-54.

\textsuperscript{50} Id. at 553, 559.
their meat. States have a legitimate interest in prolonging the lives of animals that their population happens to like. They can ban bullfights and cockfights and the abuse and neglect of animals. Of course Illinois could do much more for horses than it does—could establish old-age pastures for them, so that they would never be killed (except by a stray cougar), or provide them with free veterinary care. But it is permitted to balance its interest in horses' welfare against the other interests of its (human) population; and it is also permitted to take one step at a time on a road toward the humane treatment of our fellow animals.\(^{51}\)

In affirming the lower court's opinion, the Seventh Circuit dissolved an injunction that had prevented the enforcement of the law, thereby allowing Cavel to continue operating pending the appeal.\(^{52}\) Cavel's appeal in the D.C. Circuit Case challenging the USDA rule that allowed slaughterhouses to pay for the federal inspections was rendered moot because Cavel was no longer operating its U.S. horse slaughter plant after September 21, 2007.\(^{53}\)

**D. New Jersey State Law**

New Jersey joined the states that ban horse slaughter on September 19, 2012.\(^{54}\) The New Jersey law made it an offense if anyone "knowingly slaughters a horse for human consumption."\(^{55}\) Violations of this law occur when one "sells, barters, or offers for sale or barter, at wholesale or retail, for human consumption, the flesh of a horse or any product made in whole or in part from the flesh of a horse" or if one "knowingly transports a horse for the purpose of slaughter for human consumption, or transports horsemeat, or any product made in whole or in part from the flesh of a horse, for the purpose of human consumption."\(^{56}\)

**E. Federal Reaction to the Controversy over the Horse Slaughter Ban**

The federal ante-mortem inspection program remained defunded until 2011.\(^{57}\) In that year, the House of Representatives voted to continue defunding, but the Senate's version of the agriculture appropriations bill did

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51 *Id.* at 556-557 (internal pagination and citations omitted).
52 *Id.* at 553, 559.
55 *Id.*
56 *Id.*
not contain any language perpetuating the defunding. On the premise that the ban had brought unintended, negative consequences to horse welfare and horse values, a four member congressional conference committee restored funding in 2011 by approving the Senate’s version of the Agriculture budget, which omitted the language necessary to continue defunding the inspections.59

F. Assumption that the Ban Caused the Downturn in the U.S. Horse Industry

Given that the downturn in the horse market began the year following the closing of the domestic plants, horse slaughter proponents have argued that there is a causal relationship.60 However, this argument ignores the fact that the slaughter of U.S. horses did not diminish in the years after the closings; instead, horse slaughter shifted abroad, which is demonstrated by the fact that the export of horses for slaughter in Canada and Mexico increased more than enough to make up for the drop in domestic slaughter.61 Figure 1 illustrates this shift.

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58 Id.  
59 See id.  
61 Data aggregated over time by the author from U.S. Department of Agriculture sources. Data on file with author.
The true reason behind the decline of the horse market was a perfect storm of economic factors that have affected the U.S. horse owner with greater intensity than the hardships endured by the general U.S. population. To a large extent, these factors are the unintended consequences of government programs and subsidies such as the recently repealed ethanol subsidy.

### III. THE BAN ON DOMESTIC HORSE SLAUGHTER IS NOT CAUSING THE DECLINE IN THE U.S. HORSE INDUSTRY

According to a survey by the American Veterinary Medical Association (AVMA), private horse ownership declined 16.7% between 2006 and 2012. It has been suggested that restoring domestic horse

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62 Id.


slaughter will reverse this decline. In fact, domestic horse slaughter is unrelated to domestic horse ownership levels, evidenced by the fact that the total slaughter numbers for U.S. horses did not change substantially during this period, as demonstrated in Figure 1. At least part of this misconception is fostered by what the authors of this article contend to be a deeply flawed Government Accountability Office (GAO) report.

In June 2011, the GAO produced a long awaited report on the effect of the closing of the U.S. horse slaughter plants in response to a request from Congress. The report presented the graph in Figure 2 comparing horse prices before and after the U.S. slaughter plants were closed.


65 See Belkin & Koppel, supra note 60.
66 See supra Figure 1.
67 GAO REPORT, supra note 6.
68 Id. at 1, 3.
Average Horse Prices Before and After Cessation of Horse Slaughter for Each Price Category, Spring 2004 through Spring 2010

Price per head (dollars)

2,500
2,250
2,000
1,750
1,500
1,250
1,000
750
500
250

20th 40th 60th 60th 60th 60th

Figure 2 - Price decline of horses at auction according to GAO study

Figure 2 divides horses into categories according to their percentile price range and illustrates a surprisingly consistent price drop across all categories of approximately $110 to $140. While admitting that the total slaughter of U.S. horses had remained almost completely unchanged after the closings due to increased exports of horses for slaughter, the report went on to conclude that the majority of the price decline, 21% for the lowest price category and 8% for the median price category, was due to the cessation of domestic slaughter. Unfortunately, a clear description of the methodology supporting these findings was not

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69 Id. at 16.
70 Id. at 15.
71 See id. at 57.
72 Id. at 13.
73 Id. at 16.
included in the report, beyond a vague explanation that the data had been subjected to regression analysis and that increased hauling costs for the kill buyers to export horses to slaughter houses was likely the cause of the reduction in prices.\textsuperscript{74}

According to the GAO report, virtually all of the significant downward pressure on horse prices occurred between the 20\textsuperscript{th} and 50\textsuperscript{th} percentiles; that is, horses selling for prices less than $1,178.\textsuperscript{75} This range coincides neatly with the price range of slaughter horses.\textsuperscript{76} The American Quarter Horse Association (AQHA) and other supporters of horse slaughter immediately and successfully leveraged these findings as a way to repeal the implicit ban on horse slaughter caused by the defunding of the federal ante-mortem inspections.\textsuperscript{77}

Figure 3 shows the approximate distribution, based on numbers from 2005, of horses across various industry sectors.\textsuperscript{78} Horses being purchased for the racing and professional showing sectors do not fall in the lower (below 50\textsuperscript{th} percentile) price categories, though such horses often end up in this price range at the end of their careers.\textsuperscript{79} Therefore, there are only two significant potential buyers for these low-end horses: the slaughter buyers and recreational horse buyers.\textsuperscript{80} Given that the slaughter buyers are purchasing the same number of these horses at auction as they were before 2007 but at bargain prices, one can only conclude that it is not because they have higher expenses, but because the recreational buyers are not bidding against them.\textsuperscript{81} Prices have dropped in this percentile range because there are fewer bidders; decreases in demand cause prices to fall. This is consistent with the 16.7\% reduction in horse ownership over the study period found by the AVMA survey.\textsuperscript{82}

\begin{thebibliography}{9999}
\item \textsuperscript{74} Id. at 13-14, 56.
\item \textsuperscript{75} Id. at 16-17.
\item \textsuperscript{76} Cf. id. at 49 (indicating the report authors obtained horse price data from auctions that regularly sell "loose" horses, which are lower-value horses that may be bought for slaughter).
\item \textsuperscript{77} AQHA President Discusses Lift of Ban on Horse Slaughter, GoHORSESHOW.COM (Dec. 6, 2011), 3:26 PM, http://www.gohorseshow.com/article/AQHA/AQHA/AQHA_President_Discusses_Lift_of_Ban_on_Horse_Slaughter/36591.
\item \textsuperscript{78} National Economic Impact of U.S. Horse Industry, supra note 1.
\item \textsuperscript{79} See GAO REPORT, supra note 6, at 49.
\item \textsuperscript{80} See id.
\item \textsuperscript{81} See id. at 2 (indicating that the GAO found that the number of U.S. horses slaughtered in 2006 and 2010 were essentially the same because export numbers increased to make up for the ban on domestic slaughter).
\item \textsuperscript{82} Press Release, AVMA, supra note 64.
\end{thebibliography}
Figure 3 - Horse Population by Sector in 2005

As Figure 3 demonstrates, recreational horses represent the single largest sector of the horse industry population. Therefore, this sector also represents a major proportion of sales for farrier, veterinary and other services, as well as feed and a myriad of products sold within what was, in 2005, a $39 billion industry with a total economic impact of $102 billion.

The collapse of demand for low-end horses has not been lost on the breeders. Over the same period covered in the report, registrations of all breeds were down nearly 50%, with whole broodmare herds being liquidated. Was this simply a result of the recession, or were other factors at work?

How the GAO report can state that variations in the dependent variable, horse prices, were caused by the independent variable, the number of U.S. horses slaughtered, not changing, remains a mystery to the authors of this article. The Equine Welfare Alliance (EWA) made a request for the data and calculations under the Freedom of Information Act, but the GAO refused the request, citing congressional immunity. In any event, the price

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83 National Economic Impact of U.S. Horse Industry, supra note 1 (using data from the American Horse Council Foundation’s 2005 study of the U.S. horse industry cited supra note 1, the author created the graphical representation depicted in figure 3).

84 Id.

85 Online Fact Book: Horse Breed Registration Figures, supra note 3 (demonstrating that overall registrations have fallen by nearly 50 percent between 2006 and 2011).


data identifies a serious situation confronting the horse industry. This article will show that the horse industry is being clobbered by a confluence of forces, which were almost completely overlooked by the GAO and were largely brought on by government programs.

IV. WHAT IS REALLY KILLING THE HORSE INDUSTRY?

While Congress has been asking "what is killing the horse industry?" at least a large part of the answer appears to be "you are!" Not only has the industry been impacted by the recent economic downturn, but it has also suffered from something that the rest of the economy has been largely spared: significant inflation in virtually all its major costs as a result of government programs, subsidies, and tax incentives.

Contrary to popular perception, the average recreational horse owner is not wealthy. A survey of horse owners found that approximately 23% of owners have a combined household income less than $50,000, while 65% of owners have an income of less than $100,000. In the same survey, 73.8% of owners indicated that their costs per horse rose between 2007 and 2011, with the largest cost increases coming from feed, fuel, and veterinary care, respectively. These cost increases are precisely what a thoughtful analysis of government data would predict.

The two major types of horse feed are grass or hay and concentrated feeds. In most western states, horse hay is synonymous with alfalfa. Alfalfa is protein rich hay that is a staple in both the horse and dairy industry, and is fed both in its natural form and as dehydrated pellets or cubes. It is also a main ingredient in some higher quality concentrated horse feeds. Remarkably, in the 68 pages of the GAO report there is no discussion of the increased cost of feed during the study period and only a vague mention that the cost of feed was one of many inputs to their regression analysis. Essential feed products such as alfalfa and corn do not


89 Id. at 22-23.


92 See generally GAO REPORT, supra note 6 at 19 (reporting that the State Veterinarians interviewed thought the cost of feed was one of several factors responsible for a perceived decline of horse welfare, but not discussing the matter further).

93 See id. at 53.
appear at all in the report, and hay appears only once in a context unrelated to feed costs.\textsuperscript{94}

\textit{A. Feed Costs: Alfalfa and Hay}

Currently, there is a growing feud over how alfalfa should be allocated.\textsuperscript{95} In recent years, alfalfa exports have risen rapidly,\textsuperscript{96} due in no small part to government initiatives.\textsuperscript{97} As a staple of several industries, alfalfa is at the base of a value-added production chain. For example, when fed to dairy cows, it is converted into milk, which is in turn converted into cheese that is used in a myriad of products.

Japan has long been the single largest importer of American alfalfa.\textsuperscript{98} However, exports to China have been exploding in recent years, soaring from less than 2,000 metric tons in 2007 to 75,000 metric tons in 2009.\textsuperscript{99}

\textsuperscript{94}See id. at 21.
\textsuperscript{97}See, e.g., id at 6 (indicating that US government trade promotion activities helped stimulate the Chinese demand for U.S. alfalfa).
\textsuperscript{98}See Mooney, supra note 95.
\textsuperscript{99}WILHELM, supra note 96, at 2.
Critics of alfalfa exports argue that the entire American value-added chain is being threatened by exporting, while supporters point out that only about 4% of the crop was exported in 2010. Unfortunately, this is only part of the story.

Figure 4 depicts the amount of hay and alfalfa available to U.S. consumers each year, and clearly shows a worrisome trend. While ordinary hay production has fluctuated wildly depending on weather conditions, alfalfa production has steadily declined. When exports of alfalfa are subtracted from the declining production, the seriousness of the reduction in alfalfa available to American consumers becomes obvious. The result of this constricting supply has been a steep increase in the cost of both hay and alfalfa.

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100 Data aggregated over time by the author from U.S. Department of Agriculture sources such as: Table 8-- Hay: Production, Harvested Acreage, Yield, and Stocks, U.S. DEP’T OF AGRIC. ECON. RESEARCH SERV., http://www.ers.usda.gov/datafiles/Feed_Grains_Yearbook_Tables/US_Hay_Production_Harvested_Acreage_Yield_and_Stocks/FGYearbookTable08.htm. Data on file with author.

101 Mooney, supra note 95.

102 See ECON. RESEARCH SERV., U.S. DEP’T OF AGRIC., FEED GRAINS DATA: YEARBOOK TABLES tbl.11 (2013), available at...
B. Feed Costs: Concentrated Feed

Besides alfalfa, another major ingredient in concentrated horse feed is grain and grain byproducts, which consists of predominantly corn, oats, wheat and soy. Almost 30 years ago the government began subsidizing the use of corn ethanol as a blended fuel in gasoline. The production of ethanol consumes nearly 40% of the U.S. corn crop, and in 2012, the government ended the $20 billion in subsidies for the use of ethanol. Here again the government chose to divert significant quantities of one of the pillars of the value-added chain. In addition to its use in feeds, corn is

http://www.ers.usda.gov/datafiles/Feed_Grains_Yearbook_Tables/All_tables_in_one_file/fgyearbooktablesfull.pdf (demonstrating that the prices received by farmers per ton of alfalfa and per ton of hay have more than doubled between May 2003 and December 2012).

103 Id. (author created graph from data obtained from USDA Economic Research Service).
106 Id.
used in everything from nachos to bookbindings and antibiotics to sweeteners. Beginning in 2005, the use of corn by ethanol producers began to grow rapidly, as shown in Figure 6. This phenomenon also coincided with the recession and the period of the GAO study.

Figure 6 - Use of Corn in Ethanol Production

The sudden increase in ethanol production, after decades of slow growth, can be credited to the rise in crude oil prices, which made it advantageous to blend the subsidized additive with gasoline. As a result of this increase in ethanol production, corn prices began to rise even more rapidly than alfalfa prices. In a five year period, between December 2007 and December 2012, the corn prices received by farmers increased by approximately 86%. With this drastic price increase, it is no wonder that horse owners have come to fear their excursions to the feed store.

It is important to note that even feeds whose ingredients do not include corn are affected by changes in corn prices. The increased

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108 Econ. Research Serv., supra note 102, at tbl.91. (author created graph from data obtained from USDA Economic Research Service).
110 Econ. Research Serv., supra note 102, at tbl.9.
profitability of corn has caused land previously devoted to other grains to be reallocated to corn production,\textsuperscript{111} which constricts the supply of these other grains, thereby increasing their prices. It is even probable that this trend of switching to corn production is one of the factors behind the decline in alfalfa and hay production.

Some horse owners have compensated for these increases by buying cheaper brands of feed.\textsuperscript{112} However, even those who have stayed with a premium brand may not have noticed the price increases due to subtle changes in the order of the ingredients. Many cheaper horse feeds, and even some mid-grade horse feeds, now list peanut hulls at or near the top of their ingredient lists, while corn and alfalfa have slipped down the lists, if they are present at all.\textsuperscript{113}

Apparently even Congress could not ignore the effect of the subsidy program it had unleashed on corn, the country’s single most important food crop. Congress removed the ethanol subsidy in 2011.\textsuperscript{114} However, due to the considerable investment in the distilling infrastructure and the high crude oil prices, the ethanol industry’s corn appetite is likely to remain high despite the subsidy removal. Fortunately, Congress took one more action that might help curb this trend in the future when it removed tariffs on sugarcane imported for ethanol production,\textsuperscript{115} which may reduce the ethanol industry’s demand for domestic corn.

\textsuperscript{111} Id. at tbl.1 (showing that in the last 7 years, the number of acres planted of corn increased, while the numbers of acres planted of sorghum, barley and oats all decreased).

\textsuperscript{112} Cf. Anderson, supra note 104.


\textsuperscript{114} Pear, supra note 105.

Another glaring omission from the GAO analysis is fuel costs. Gasoline and diesel costs are felt keenly by horse owners who tend to own larger vehicles such as "dually" (dual rear wheel) pick-up trucks needed to haul stock animals and hay. These vehicles have poor fuel efficiency and tend to be used not only for pulling trailers, but for general transportation as well.

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116 ECON. RESEARCH SERV., supra note 102, at tbl.12 (author created graph from data obtained from USDA Economic Research Service).
117 See GAO REPORT, supra note 6, at 58 (demonstrating that fuel costs were not included in the GAO’s model).
Moreover, the hay and alfalfa prices referenced earlier were those received by the farmers who grew the hay. Therefore, every increase in the price of gasoline adds a surcharge that the horse owner, as the purchaser, must pay on a ton of hay to get the hay to their property. The costs of transporting feed and horses with large and inefficient trucks help explain why surveyed horse owners ranked fuel as the second biggest contributor to the escalation of their costs after feed.\footnote{Weekly U.S. All Grades Conventional Retail Prices, U.S. ENERGY INFO. ADMIN., http://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=EMM_EPM0U_PTE_NUS_DPG&f=W (last visited Jan. 23, 2013) (author created graph from data obtained from US Energy Information Administration).}

V. CONVERGENCE: THE COLLECTIVE EFFECT OF THESE FACTORS

The uncanny convergence of all these factors can best be appreciated by considering each factor in terms of its percentage increase from the base year 2000, which is depicted in Figure 9 below. Just before

\footnote{AM. HORSE PUBL'NS, supra note 88, at 23.}
the beginning of 2006, all of the factors except fuel converged at an overall price increase of about 25%. This was the calm before the storm. By the time the U.S. slaughter plants closed in 2007, virtually all of the cost factors were starting a wild upward swing. In 2008, the recession kicked in and the rate of unemployment began to add to the pressures on horse owners.121

![Figure 9 - Percentage Increase in Stress Factors for Horse Owners](image_url)

It is important to note the scale of this graph. These are not minor increases, but rather increases of as much as 230% since 2000. Worse, these factors compounded each other in ways already discussed. The result of these increases has been a dramatic downsizing by horse breeders and owners. Sadly, these forces have also pounded the equine rescue community, which represents the last good hope for a retiring sport horse.

There are those who propose to restore the horse industry by bringing horse slaughter back to the U.S. As already shown, exports to Canada and Mexico mean that there was never a lack of slaughter, therefore, the end of domestic slaughtering had nothing to do with the


122 Author created graph from the following sources: ECON. RESEARCH SERV., supra note 102, at tbls.11 & 9; Weekly U.S. All Grades Conventional Retail Prices, supra note 119; Labor Force Statistics from the Current Population Survey, supra note 121.
current plight of the horse industry. Increasing slaughter is no more likely to cure the industry’s ills than the medieval practice of bleeding a patient. It is true that reinstating domestic horse slaughter could marginally increase prices because kill buyers would not have to pay to export the horses abroad, but without competition from recreational buyers it is likely that slaughter buyers would simply pocket some or all of the savings. Moreover, it would not address the root of the problem: the rising costs of owning a horse and the corresponding decrease of horse ownership. The only bright spot in all this is that the industry has already gone through a huge correction. Foal registrations are down about 50% from peak, as depicted in Figure 10.

![Figure 10 - Foals Registered vs. Horses Slaughtered](image)

VI. CONCLUSION

If the horse industry is to survive, it must understand that it faces the same issues as many other animal industries. Furthermore, the enormous political energy being expended by the animal agriculture

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123 Graph created by author from data gathered from sources including: Online Fact Book: Horse Breed Registration Figures, supra note 3; GAO REPORT, supra note 6, at 11. Data on horse exports aggregated over time by the author from U.S. Department of Agriculture sources. Data on file with author.
industry to preserve horse slaughter is a complete misallocation of its political resources. In truth, the interests of animal agriculture and the horse industry are closely aligned.

The same is true for some horse registries such as the American Quarter Horse Association. While the AQHA and their AQHPac\textsuperscript{124} have spent precious funds lobbying to keep horse slaughter available in the U.S.,\textsuperscript{125} their registrations and revenues have continued to plunge. In 2011 alone, AQHA revenues from new foal registrations were down 7%\textsuperscript{126}

The problem for both animal agriculture and the horse industry comes down to the allocation of resources, and government programs largely perpetuate this problem. If the current trends continue, many desirable jobs in the industry will be lost and horse ownership will once again become what it was in the dark ages: the exclusive domain of the privileged class.


\textsuperscript{125} In addition to the horse slaughter bans at the state level and defunding of federal ante-mortem inspections, there has been an effort in the last decade to enact a federal ban on slaughter that would also prohibit the sale and export of U.S. horses for slaughter for human consumption. See COWAN, supra note 5, at 3-5; see also J. Finch, Legislative Efforts on Horse Slaughter, HABITAT FOR HORSES (May 9, 2012 7:28 PM), http://www.habitatforhorses.org/legislative-efforts-on-horse-slaughter/.