

5-2014

A Review of Economic Impacts of Horse Slaughter in the United States

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A REVIEW OF ECONOMIC IMPACTS OF HORSE SLAUGHTER IN THE UNITED
STATES

by

Kristen Fort

B.S., Southern Illinois University, 2012

A Research Paper

Submitted in Partial Fulfillment of the Requirements for the
Masters of Science in Agribusiness Economics

Department of Agribusiness Economics
Southern Illinois University Carbondale

August 2014

RESEARCH PAPER APPROVAL

A REVIEW OF ECONOMIC IMPACTS OF HORSE SLAUGHTER IN THE UNITED STATES

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Kristen Fort

A Research Paper Submitted in Partial
Fulfillment of the Requirements
For the Degree of
Masters of Science
in the field of Agribusiness Economics

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June 17, 2014

AN ABSTRACT OF THE RESEARCH PAPER OF

KRISTEN FORT, for the Masters of Science degree in AGRIBUSINESS ECONOMICS,

TITLE: A REVIEW OF ECONOMIC IMPACTS OF HORSE SLAUGHTER IN THE UNITED STATES

MAJOR PROFESSOR: Dr. DWIGHT R. SANDERS

Horse slaughter has been a widely contested issue in the United States recently. There are arguments for and against the legalization of horse slaughter, with passionate members on each side of the debate. A market does exist for horses, and as such, the economic impacts of policy decisions should be discussed when addressing this topic. The fact is, that regardless of personal feelings concerning this matter, consequences exist with the cessation or dissolution of this practice. To better understand and draw conclusions on what this issue means for the United States from an objective, economic standpoint, the history and facts surrounding horse slaughter must be reviewed as well as various arguments for and against. An objective approach is necessary to appropriately determine the economic benefit or cost of horse slaughter legislation; as such, both sides will be addressed and the economics associated with the issue will be reviewed and presented further. This is aimed at reviewing policy and legislation affecting equine welfare as well as the economics associated with termination of domestic horse slaughter in the United States.

TABLE OF CONTENTS

<u>CHAPTER</u>	<u>PAGE</u>
ABSTRACT	i
CHAPTERS	
CHAPTER 1 – Topic Introduction	1
CHAPTER 2 –Review of Literature	2
CHAPTER 3 –Background, History, and Legislation	6
CHAPTER 4 –Arguments For and Against.....	10
CHAPTER 5 –Public Interest	19
CHAPTER 6 –Implications and Recommendations.....	20
CHAPTER 7 –Conclusion	21
REFERENCES	22
APPENDICES	
Appendix A – Related Figures.....	24
VITA	33

CHAPTER I

TOPIC INTRODUCTION

The issue of horse slaughter has been very popular in the United States recently. There are arguments for and against legalizing horse slaughter, with passionate members on each side of the debate. The economic impact of horse slaughter in the United States should be discussed when addressing this topic. The fact is, that regardless of personal feelings concerning this matter, consequences exist with the cessation or dissolution of this practice. To better understand and draw conclusions on what this issue means for the United States from an objective, economic stand point, the history and facts about horse slaughter must be reviewed as well as the arguments both for and against. An objective approach is necessary to appropriately determine the economic benefit or cost of horse slaughter legislation; as such, both sides will be addressed and the economics associated with this issue will be reviewed and presented further. This is aimed at addressing policy and legislation affecting equine welfare as well as the economics associated with termination of domestic horse slaughter in the United States.

Horse slaughter, or harvesting, has received mounting attention in recent years, with an ostensible peak now, as bans and orders of cessation are expiring and bills are being signed which permit the practice. Some in the horse industry are understandably pleased with the recent development; however, as a positive side exists, so must a negative. Animal rights groups and some horse owners have furiously contested this movement in the market for horses. One paramount question in all of the back and forth must be that of a logical and economic orientation. What consequence does this pose for the horse industry in the United States?

CHAPTER II

REVIEW OF LITERATURE

One significant theme in the literature reviewed in writing this paper was a general lack of market research on the horse market, even though horses are classified as livestock by the United States Department of Agriculture and a market exists which contributes to the economy. Many models used in studying impacts in the market for horses associated with legislation were hedonic. Some studies used empirical models and others used 2SLS, or two-stage least squares, and OLS, or ordinary least squares methods.

The Potential Impact of a Proposed Ban on the Sale of U.S. Horses for Slaughter and Human Consumption, by Michael S. North, DeeVon Bailer, and Ruby A. Ward, details some of the historical legislation associated with horse slaughter and the impacts that a ban on horse slaughter would have on the horse industry as a whole in the United States. The authors found that a loss of an estimated \$300 per horse would occur if such legislation disallowing horse slaughter were enacted. Also, declining supply of exported horsemeat was explained by competing imports and the lower real prices.

These conclusions were reached through the utilization of a net present value model for horses before and after a ban and a model for the supply and demand for the exports of horsemeat. The authors determined that a 2SLS method was the most appropriate for parameter estimation; however, they also compared these results to the results from an OLS estimate. These procedures confirmed that demand and the quantity of U.S. horsemeat exports were negatively correlated, income had a positive and

statistically significant influence on U.S. horsemeat exports, meaning that the product is considered a normal good.

Finally, the authors conclude that the decline of U.S. horsemeat exports to Europe can be attributed to the previous existence of only a few slaughtering facilities in the United States lead to increasing imports from other countries with a higher volume and lower priced products, which lead to lower prices for horsemeat from the United States as well. The assertion is also made that a ban on the slaughter of horses will lead to not only an immediate negative impact on the horse industry, but also a perpetual increase in the expense associated with the disposal costs for unwanted horses. It is further pointed out that there is no provision for the increased spending for care of unwanted horses by Humane Society facilities.

The Unintended Consequences of a Ban on the Humane Slaughter (Processing) of Horses in the United States, prepared for the Animal Welfare Council, Inc. by James J. Ahern, David P. Anderson, DeeVon Bailey, Lance A. Baker, W. Arden Colette, J. Shannon Neibergs, Michael S. North, Gary D. Potter, and Carolyn L. Stull was also reviewed. This paper included welfare considerations associated with horse processing, industry facts and costs, and environmental impacts. The lack of a domestic market for horsemeat in the United States is explained, as American culture does not necessarily view horses as a viable food source, but rather a companion animal. Also, the authors explain why horses are most likely to be treated in a humane manor domestically versus in other countries. It is concluded that the owners of horses as well as the state and local governments will feel an impact from the cessation of horse slaughter in the United

States, as the welfare of unwanted horses will have to be addressed by government agencies.

Mykel Taylor and Elizabeth Sieverkropp also conducted a study on horse price impacts associated with U.S. slaughter plant closures in their paper, *The Impacts of U.S. Horse Slaughter Plant Closures on a Western Regional Horse Market*. A hedonic price model estimated with quantile regression and ordinary least squares regression displayed a price decline of between 12% to 16% for horses at or below the price level of \$1500 per horse, a direct consequence of cessation of domestic slaughter.

The authors address the usage of auction horse prices in hedonic models of other papers, which tend to be skewed, with most of the horses selling within a small range with a few higher prices exceptions. They also acknowledge that economic studies on this topic are fairly scarce compared to other markets.

The model used contained many variables including sale price, age of horse, differing breeds, training levels, and lineage. Findings with the OLS models suggested that a ban on horse slaughter did not have a statistically significant impact on auction horse prices. As a result, the data was re-estimated using quantile regression to address the skewed nature of the data, revealing a negative price impact post-ban with “reasonably high statistical significance”.

What Are the Consequences of United States Government Slaughter Policies on Horse Prices? by Mallory K. Vestal, Jayson L. Lusk, Steven R. Cooper, and Clement E. Ward, poses and answers the question outlined in the title. The authors utilize quantile regression to account for the different price categories of horses and the different impacts experienced by each of them. They hypothesize that the effects of a horse slaughter ban

would be different for different categories in the distribution of horse prices. Once again, quantile regression is used to eliminate the biased estimates associated with OLS due to the differing implicit prices for characteristics between higher priced and lower priced horses. The results of this research lead to the conclusion that the closure of horse slaughter facilities did not uniformly impact all horse price categories, as those in the lower quantiles experienced a higher impact.

The Government Accountability Office report from 2011 on Horse Welfare: Action Needed to Address Unintended Consequences from Cessation of Domestic Horse Slaughter, outlined the main issues associated from the cessation of horse slaughter in the United States. Much of the data and information used in constructing the graphs and figures in the appendix of this paper came from the tables and graphs of this report. This report was very informative on the positions of the public and the problems that can arise from the cessation of horse slaughter in the United States, which may not have been conceived previously.

Articles from various news channels, covering the current events associated with horse slaughter were used to stay up to date on any developments in legislation and opinion. Also, legislative websites, animal rights websites, and other similar sites were accessed for language of bills, viewpoints of proponents and opponents of domestic horse slaughter, and information on logistics and requirements for transport.

CHAPTER III

BACKGROUND, HISTORY, AND LEGISLATION

Simply stated, horse slaughter is the harvesting of horses for consumption. This mainly is for human consumption elsewhere in the World, in areas such as Europe, China, and Japan. One important distinction to be made is the difference between rendering and horse slaughter. Rendering is a process by which the carcass of a deceased animal is utilized for usage in other products. Rendering plants do not serve as a facility to euthanize the animal, rather as a method of a disposal of the carcass that an owner may wish to utilize. As with any service, there are costs to the owner associated with the election to dispose of an animal in this manner, which will be reviewed further. It is important to note that legislation on horse slaughter does not pertain to these rendering facilities for the carcass of the animals which deal mainly in glue and animal feeds, as these products are not inspected or regulated by the FDA or USDA, and the facilities do not deal in the actual slaughter of the animal.

In the past, horse slaughter was a viable industry in the United States; however, even though this was the case, the American public as a whole was not the consumer of the finished products, horsemeat. Most of the market for horsemeat products lies overseas, where more of a preference exists for these products. The exportation of horsemeat is almost exclusively due to the preferences of the typical American consumer. Most Americans take issue with the concept of eating horsemeat, as the horse is seen as more of a pet and a companion of the early years, hailed for the assistance offered in the building of America, as it is known today (Parisi, 2009). In contrast, in countries such as

China and Japan and various countries in Europe, horsemeat is prized as a delicacy, known for the lean properties it possesses.

In the 1980s, there were sixteen functioning domestic horse slaughter facilities. In 1994, less than half that number was in existence. Then in 2006, there were only three facilities in the United States. The feelings American consumers have for horses finally spilled over into legislation as domestic horse slaughter was ceased on May 24, 2007, with the closure of the last slaughterhouse for horse processing in the United States. This came shortly after Congress stopped all funding for inspections in 2006 (Shames, 2011). With the removal of available funds for inspection, the sale of meat was essentially banned, as it could not be inspected, a key element in processing for consumption. This was temporarily circumvented by horse slaughter facilities by the election to pay their own inspection fees, which was a legal loophole up until March 28, 2007, when the U.S. District Court for the District of Columbia ruled the practice of paying the USDA for their horsemeat inspections was illegal. Cavel International, a company based out of Belgium, appealed this ruling, and they were allowed to resume operation until a decision was made. On May 24, 2007, former Illinois Governor, Rod Blagojevich signed Bill H.B. 1711, which amended the Illinois Horse Meat Act banning the slaughter of horses for human consumption in Illinois (Potter, 2014). Exact language of the H.B. 1711 states that it 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 horsemeat if that person knows or should know that any of the horsemeat will be used for human consumption...” (Illinois General Assembly, 2007). Cavel International, which was based in Dekalb, Illinois sought to appeal this Bill; however, On September 21, 2007, the U.S. Court of Appeals for the 7th

Circuit came to the decision that the Illinois horse slaughter ban was indeed constitutional (Potter, 2014). In the same year, horse slaughter in Texas ended when the 1949 Texas law, which banned the sale of horsemeat but had not been previously enforced, was upheld by the U.S. Court of Appeals for the 5th Circuit (Sieverkropp, 2013).

On November 1, 2013, it was reported that horse slaughter was legal in Oklahoma due to a bill signed in March of 2013 by Oklahoma Governor Mary Fallin (KFOR-TV, 2013). Also on November 1, 2013, a temporary ban, which had previously barred the practice, expired. The expiration came after a federal judge in Albuquerque, NM failed to reach a judgment. Plants in both New Mexico and also Missouri announced plans to reopen and resume operations. As in the past, this course of events was fiercely challenged by animal rights and animal protection groups, which stated plans to file for an extension of the restraining order on practicing horse slaughter. In addition to the filing for an extension, these groups are also in the process of suing the Department of Agriculture over the permission of horse slaughter. Blair Dunn, a representative for Valley Meat Co. of Roswell, NM and also Rains Natural Meats of Gallatin, Missouri, stated plans to fight the attempt for extension according to the Associated Press (Associated Press, 2013). As a result of this continual litigation and political back and forth regarding policy, one plant in Iowa, which was previously opened for horse processing, converted their operation to beef in an attempt to avoid the difficulties associated with domestic horse slaughter.

On November 5, 2013, the federal court of appeals issued a temporary order, which banned the resumption of domestic slaughter in the United States as an appeal case is considered (The Humane Society of the United States, 2013). In January of 2014, the

Federal Budget, containing language prohibiting horse slaughter was passed by Congress and signed by President Barak H. Obama (Potter, 2014).

Prior to closing, the horse processing industry in the United States produced meat that was valued at \$65 million per year (Cowan, 2011). The estimated contribution of the horse industry to the United States economy in 2005 was \$39 billion directly and approximately 1.4 million jobs (Ahern, 2006 and Vestal, 2012). Dale Steinhoff, the owner of Southeast Nebraska Livestock Auction, stated in an interview with the New York Times, that previously they would sell close to 100 horses per month, but that with the cessation of horse slaughter, that could be their total for the year (Sulzberger, 2011).

CHAPTER IV

ARGUMENTS FOR AND AGAINST

Arguments for horse slaughter, while seemingly dominated by the financial scope of thinking, also include an ethical grounding. The generalization of the sides of this argument into heroes and villains or those with monetary versus ethical concerns is rushed and superficial. Although the economic facet of this issue is the main point of focus, a deeper understanding of the issue and where it stems from is important in a thorough analysis of the true impact that can be observed with the cessation of horse slaughter in the United States.

Those in favor of domestic horse slaughter have several key points in addressing the permission of this practice in the United States. These include first and foremost, the existence of facilities for horse slaughter on either side of the United States, in both Canada, where there are slaughter facilities in Owen Sound, Ontario, Yamachiche, Quebec, Massueville, Quebec, and Fort Mcleod, Alberta, and also Mexico (North 2005). Also, the price of horses and the effect of the cessation of this practice on the market for horses in the United States is a concern. On the more ethical side of the argument, the economic downturn of 2008 had a large impact on the horses and their general welfare in the United States, as they are mainly companion animals today. The ability and feasibility of the role horse rescue facilities can play needs to be addressed from the more ethical side of the debate as well (Shames, 2011 and Simon, 2011).

Figure 1. illustrates the number of horses processed in the United States prior to the banning of domestic horse slaughter practices. It is important to note that the last full year of domestic horse slaughter was 2006.

Although domestic horse processing for consumption can be banned or restrained, the USDA has little bearing on the practices of slaughterhouses in neighboring countries, Canada and Mexico. Though horses may be kept from these facilities in the United States, they are often sent across the border, whether it is to the North or the South and slaughtered there, in Canada or Mexico, often after a long and stressful journey (Shames, 2011 and Sulzberger, 2011). *Figure 2.* illustrates the increase in number of horses exported for slaughter after the cessation in 2007. It can be seen that the number of horses exported for slaughter in the years after the cessation of domestic horse slaughter in 2007 has been increasing from the 32,789 exported in 2006. In 2012, the last year on the graph, 176,223 horses were exported for slaughter. Finally, *Figure 3.* displays the quantity of horses slaughtered, by combining the number of horses slaughtered domestically through 2007 and the number of horses exported for slaughter through 2012. This gives a more accurate representation of the actual quantity of horses slaughtered, and shows that the actual quantity has remained fairly stable since 1995, illustrating the lack of impact of domestic cessation on quantity of horses slaughtered all together.

From a financial and economic viewpoint, banning horse slaughter in the United States caused a collapse of the domestic horse market. This is due to the removal of the effective price floor established by the slaughterhouses. Without this present in the market to establish a minimum acceptable price for horses, the price dropped, effectively devastating the market for horses and causing a loss of equity built in horses, whether it be from auctions through breeding or showing. Many were forced from the business as a result of this massive downturn in the market (North, 2013, Shames, 2011 and Sulzberger, 2011). Price implications are displayed in *Figure 4.* located in the appendix

at the back of the paper. It can be observed that this impact has caused prices for horses to decline from eight to twenty percent in many price categories, with the greatest decline in the lower 20 percent price category. *Figure 5.* in the appendix displays the average horse prices by percentile rank before and after the cessation, using data from the spring of 2004 to the spring of 2010. It can be observed that average price has declined in all price categories, demonstrating that the impact of the cessation of domestic horse slaughter in the United States is not limited to the lower price category of horses, but rather effects most of the horses in the market to varying degrees. *Figure 6.* in the appendix displays how much the elimination of domestic horse slaughter practices has impacted various price categories according to percentile rank. It can be seen that the largest percentage change occurred in the 20th percentile rank price category, with an impact of -20.93% change in prices. This occurred alongside the -10.92% change in the prices of horses in the 40th percentile rank price category and a -7.83% change in the prices of horses in the 50th percentile rank price category. The changes in the upper categories of 60th and 80th percentile rank categories were much smaller, due to the nature of the types of horses that generally make up the upper tiers of the market, such as race horses, show horses, and highly trained companion or trail horses (Shames, 2011).

Although the legislation preventing horse slaughter in the United States is aimed at the protection of the welfare of these animals, in some cases the reverse effect can be seen. This can be mainly attributed to the fact that the legislation prohibiting horse slaughter in the United States has no provision for a financial support system for an increase in the number of unwanted, neglected, or even abandoned horses. All of which often stem from insufficient economic resources needed for the proper maintenance and

upkeep of horses and their health. No one wants horses to be treated inhumanely, but the consequences for horses with the cessation of horse slaughter cannot be ignored (Ahern, 2006). The cost to maintain an unwanted horse throughout its natural death was found to average \$2,340 for each horse, every year, which could lead to a cost of \$25,740 for just the estimated 11 year retirement period of a horse's life (North, 2005 and Ahern, 2006). This cost does not take into account the "useful" or working time frame of the life of a horse or the costs that may arise if the horse is sick, injured, or has a chronic condition.

Though a fair argument that unwanted and neglected horses should be sent to rescue and placement exists, the reality of what these facilities can handle must be addressed from an ethical as well as economic standpoint. A direct result of the cessation of horse slaughter in the United States was an increase in the number of abandoned and neglected horses. Figures for the number of horses these facilities can handle nationwide have been estimated at around 6,000 animals, with many at or nearing full capacity in 2011. This has caused a number of aforementioned facilities to take in additional animals outside of the scope of normal operations. This problem is further compounded by a dissipating lack of donations in the recent recession and the lack of funds available. As such, there have been reports of animals later being seized for lack of proper care in West Virginia, Florida, California, and New York. Also, facilities similar to those in New Hampshire and Pennsylvania have had to shut down, attributing the inability to maintain operations to financial stress. In addition to this, state and county governmental agencies bear the costs of investigating growing cases of neglect and abandonment in many of the western states (Shames, 2011).

In addition to horse neglect cases, horse abandonment cases have risen. Native American tribes in western states reported in a study by the National Tribal Horse Coalition in 2009 that horses on their lands numbered over 30,000. This has led to substantial degradation of tribal lands and difficulty in reestablishing native animal populations, projects that are partially supported by the federal government. This is mainly due to overgrazing of not only wild horse populations, but also abandoned horses. It was also pointed out by The Department of the Interior's Bureau of Land Management that many abandoned horses are lacking in natural survival skills and are often unfamiliar with which plants are safe to eat or are spurned or injured by wild horses. Also, diseases that domestic horses are immune to or vaccinated against can be introduced into the wild horse population if horses continue to be abandoned (Shames, 2011).

The main and most obvious argument against the permission of horse slaughter in the United States is obviously rooted in humane treatment of the animal. Many animal rights organizations maintain that the slaughter of horses for human consumption is cruel and inhumane, and as such should be prohibited. One argument against horse slaughter is really against the method by which the horse is euthanized. Animal rights organizations hold that the physical method of utilizing a captive bolt, more commonly known as a bolt gun, is not as effective on horses as it is on the other livestock it is used on, such as cattle. The American Veterinary Medical Association does report that there are two acceptable methods for the euthanization of a horse, which include the following:

- An overdose of barbiturate anesthesia, usually pentobarbital, which is administered with a sedative, or,

- A physical method of euthanasia from a gunshot or a penetrating captive bolt causing trauma to the cerebral hemisphere and brainstem resulting in an immediate painless and humane death (Ahern, 2006).

Animal welfare organizations have pointed to economic downturn, as opposed to the cessation of domestic horse slaughter, as the cause of rising equine abandonment or neglect cases (Dawson, 2008). Animal Welfare Institute representatives stated in March of 2010 that since a ban on selling horses for slaughter was imposed in 1998, they offered a reward of \$1,000 for any notification of horse abandonment, and as of June 2011 they had still never received a tip. Also, since the same ban in California, the Humane Society of the United States and United Animal Nations reported that no rise in abuse or neglect cases has been observed. This was also the case in Illinois after the closure of a horse slaughter facility in 2002. Officials at the Humane Society of the United States did report that there is no solid horse abandonment data, but acknowledged an increase in this practice of abandonment as the economy failed in 2008 (Shames, 2011).

Another concern for processing horses for human consumption comes from the usage of antibiotics or other up-keep practices, which go along with an animal that is not raised with the sole intent for consumption, such as cattle or hogs. The government in Canada, where horse slaughter is still legal, has handled many of these reservations effectively. An agreement was reached between the Animal and Plant Health Inspection Service, or APHIS, and the Canadian Food Inspection Agency, or CFIA, in October of 2002 stating that either at points of entry or slaughter facilities, animals would be inspected for the following requirements:

- Health certificates for the horses are endorsed by USDA-accredited veterinarians within the 30 days prior to export.
- Horses are clinically healthy, fit for travel, and transported humanely to the points of entry.
- Owner/shipper certificates are properly completed, including date, time, and location the horses were loaded.
- Horses are listed correctly on the owner/shipper certificate, so that for example, the backtags on the horses match the backtags listed on the certificate.
- An ante-mortem inspection of each horse is performed.
- Date and time the shipment arrived at the facility is noted on the certificate.
- Copies of all relevant documents (owner/shipper certificates) are returned to APHIS each month.

This helps insure first and foremost, that animals exported are treated humanely and are of good health, and also that stolen horses or lost horses are not sent away for profit (Whiting, 2007).

The welfare of the horses is also a concern; however, with the cessation of domestic horse slaughter, the average number of miles traveled by horses to slaughter facilities increased from 550 miles in 2005 and 2006 to 753 miles in 2008 and 2009. According to a report by the Government Accountability office in 2011, this distance is actually likely to be higher than 753 miles after designation for slaughter. This is because some shippers hold off on the designation until close to arrival at the facility (before banning horse slaughter) or after crossing the border into a country where horse slaughter is legal (after banning horse slaughter). These longer distances, which come along with the cessation

of domestic horse slaughter, make the task of successfully enforcing transportation regulations to protect horse welfare increasingly difficult for APHIS. This is another reason the aforementioned agreement with Canada's CFIA is so important. The United States, Canada, or any other wealthy nation will likely not have the same potential impact on the policies of countries such as Mexico, when it comes to horse slaughter and animal treatment, as can be seen in fruit and vegetable markets. This is mainly due to the fact that a larger market exists in the rest of the world and the United States as a whole is not a consumer in the horsemeat market (Ahern, 2006). Furthermore, the infrastructure for transportation of horses for slaughter is less developed than those for other livestock species, as it is composed mainly of independent contractors who buy and sell horses on a regular basis until they have a large enough load to haul to slaughter facilities (Speer, 2001).

Legislation passed aimed at protecting horse welfare has actually become a roadblock for USDA inspectors to insure the welfare of horses designated for slaughter, as the funding for inspection has been blocked since 2006. One such example of this occurred in 2010, when an inspector checking the conveyance used for transportation of horses discovered a mare had given birth to a foal during transport. Due to regulations stating that horses must be fit for travel, this would have been a violation of the humane transport regulations; however, since he was prohibited to inspect the horses to determine which mare had birthed the foal, the opportunity to document the violation was lost. To compound this, the budget for the transport program has declined by over \$100,000 in the past five years, further complicating the issue (Shames, 2011 and Whiting, 2007).

Many states have passed legislation to combat the issues of neglect or cruelty associated with exportation of horses and the cessation of slaughter. Montana passed a law in 2009, which permits a horse owner who is unable to care for the animal to surrender it to the state at livestock auctions without animal cruelty charges, Colorado embedded a voluntary contribution to the Colorado Unwanted Horse Alliance function in state tax return forms, and Kentucky created the Kentucky Equine Health and Welfare Council and permitted them to build facilities and certify existing voluntary facilities for the care of unwanted or neglected horses. The National Congress of American Indians and the Northwest Tribal Horse Coalition both offered solutions for managing overpopulated herds. Arkansas, Oklahoma, Utah, Wyoming, North Dakota, and South Dakota have all petitioned Congress to either reinstate horse slaughter or resume funding of inspection programs as well (Shames, 2011).

Furthermore, questions exist pertaining to the utilization of these animals after slaughter. There is very little waste involved in the processing of horses. The skins of younger horses, often referred to as “pony skin”, are used in manufacturing high-end leather goods, such as shoes and purses. The meat that is not exported is used in feeding animals in zoos across the country; the mane and tails are sent to China for use in making paintbrushes. The small intestines are sent to Egypt, and used for sausage casings. The rest of the harvested animal is sent to various rendering plants, where they are processed to be utilized in common products such as lubricants, polishes, soaps, cement, ink, lipstick and other cosmetics, Crayola crayons, Jell-O, gummy candies, lard, gel in canned meat products, agricultural feeds, and pet food products (Born Free USA, 2002).

CHAPTER V

PUBLIC INTEREST

Data on search trends on Google indicate that public interest in horse slaughter and also horsemeat peaks around legislative milestones. *Figure 7.* and *Figure 8.* located in the appendix allow for the visualization of public interest in the topics of horse slaughter (*fig. 7*) and horsemeat (*fig. 8*) according to Google search trends.

Important years to note in referencing the horse slaughter graph are 2006, which was the last full year for domestic horse slaughter, and 2007, when domestic horse slaughter ceased (Shames, 2011). Also, 2013, when the temporary orders banning horse slaughter expired and frantic legal action to reinstate them ensued (KFOR-TV, 2013). The horsemeat graph peaks in 2013 when there were reports of horsemeat in Ikea meatballs, which lead to their recall (Castle, 2013).

CHAPTER VI

IMPLICATIONS AND RECOMMENDATIONS

Due to the fact that with the domestic cessation of horse slaughter comes an apparent increase in the number of horses exported, several provisions must be made if horse slaughter will continue to be illegal in the United States. These include the following:

- The agreement between APHIS and CFIA will need to be continually reviewed and revised to ensure the welfare of animals being exported.
- Establish a similar relationship with Mexico, where many horses are exported.
- The USDA should be given the appropriate funding necessary to continue inspections of transportation practices and authority should be expanded to include the animals being transported to ensure compliance with regulations.
- Appropriations will have to be made for the continually increasing demands placed on rescue facilities. Options such as subsidies, grants, or additional funding will have to be considered to promote the welfare of animals in these facilities and account for increasing the normal scope of operations.
- The possible implementation of a “check-off” style system, similar to that utilized in the cattle industry, which would place the tax burden for programs on those who participate in horse auctions and sales.

CHAPTER VII

CONCLUSION

Finally, domestic horse slaughter will always be a topic of disagreement between groups. This is mainly due to emotional attachments to this animal, whether they stem from the historical importance of horses in the United States, or the companion aspect of the species. Some key points which can be agreed on are that with the prohibition of horse slaughter in the United States came an increase in exports of horses to Canada and Mexico, effectively removing the \$65 million which had previously come from horse meat exported or used in zoos by the United States and increasing costs for owners, as well as a significant reduction in the prices received for horses in every price category except the top 40 percentile price rank of horses which is mainly comprised of race or show horses and thoroughbred type horses. Policy makers should consider these facts as well as the ethical concerns associated with over crowding or underfunding of agencies attempting to cope with the increasing number of unwanted horses.

Also to be considered is the realization that the prohibition of horse slaughter in the United States does not equal a victory for the welfare of domestic horses. Horses are currently being transported to other countries for slaughter, countries that may not have the same ethical requirements or provisions for humane treatment practices for livestock that is found in the United States. To better protect the welfare of horses in the United States, this will have to be addressed, and the notion that horses may be treated better at processing facilities domestically as opposed to those transported to and slaughtered in foreign countries, where there is no real influence on policy due to the lack of a large export market in the States, will have to be entertained.

REFERENCES

- Ahern, James J., David P. Anderson, DeeVon Bailey, Lance A. Baker, W. Arden Colette, J. Shannon Neibergs, Michael S. North, Gary D. Potter, and Carolyn L. Stull. "The Unintended Consequences of a Ban on the Humane Slaughter (Processing) of Horses in the United States." Animal Welfare Council, Inc. May 15, 2006. April 30, 2014.
- Associated Press. "Temporary order against horse slaughter expires." 5KSDK.com. November 1, 2013. November 1, 2013.
<http://www.ksdk.com/story/news/2013/11/01/new-mexico-missouri-horse-slaughter/3348517/>.
- Born Free USA. "Rendering: The Invisible Industry." Animal Issues, Volume 33 Number 3, Fall 2002. September 5, 2002. November 6, 2013.
- Castle, S. and A. Higgins. "Ikea Recalls Meatballs After Detection of Horse Meat." Huffington Post, February 25, 2013. December 7, 2013.
http://www.nytimes.com/2013/02/26/world/europe/ikea-recalls-its-meatballs-horse-meat-is-detected.html?pagewanted=all&_r=0
- Cowan, T. "Horse Slaughter Prevention Bills and Issues." Washington DC: Congressional Research Service, CRS Report 7-5700. 2010. November 1, 2013.
- Dawson, P. "An Epidemic of Abandoned Horses." Time Magazine, May 2008. November 1, 2013.
- Equine Welfare Alliance. "US Horses Slaughtered (Yearly 1989-2013)." November 6, 2013. http://www.equinewelfarealliance.org/uploads/00-Slaughter_Statistics.pdf
- Google. Trend Search. February 4, 2014.
<http://www.google.com/trends/explore#q=Horse%20slaughter&cmpt=q>
- Google. Trend Search. February 4, 2014.
<http://www.google.com/trends/explore#q=Horse%20meat&cmpt=q>
- The Humane Society of the United States. "Horse Advocates File Emergency Appeal to Block Horse Slaughter." The Humane Society of the United States. November 6, 2013. November 4-5, 2013.
http://www.humanesociety.org/news/news_briefs/2013/11/horse-advocates-file-emergency-appeal-110413.html.
- Illinois General Assembly. "Bill Status of HB1711 98th General Assembly." Illinois General Assembly. May 24, 2007. February 4, 2014.

- www.ilga.gov/legislation/BillStatus.asp?DocNum=1711+GAID=9+DocTypeID=HB+LegIg=30536+SessionID=51.
- KFOR-TV. "Horse slaughter facilities now legal in Oklahoma." News Channel 4 KFOR-TV Oklahoma City. November 1, 2013. November 1, 2013. <http://kfor.com/2013/11/01/gov-fallin-signs-horse-slaughter-bill/>.
- North, Michael S., DeeVon Bailey, and Ruby A. Ward. "The Potential Impact of a Proposed ban on the Sale of U.S. Horses for Slaughter and Human Consumption." Agricultural Economics Association of Georgia Journal of Agribusiness 23:1 (2005). September 9, 2013.
- Parisi, Paula. "The Pros and Cons of Horse Slaughter." The Equestrian News. August 1, 2009. November 1, 2013. <http://theequestriannews.com/2009/08/01/the-pros-and-cons-of-horse-slaughter/>.
- Potter, Leslie. "Horse Slaughter Timeline." HorseChannel.com. January 2014. February 4, 2014. www.horsechannel.com/horseslaughter-timeline.aspx.
- Shames, Lisa. "GAO: Horse Welfare Action Needed To Address Unintended Consequences from the Cessation of Domestic Horse Slaughter." United States Government Accountability Office. June 2011. September 9, 2013.
- Sieverkropp, Elizabeth and Mykel Taylor. "The Impacts of U.S. Horse Slaughter Plant Closures on a Western Regional Horse Market." Journal of Agricultural and Resource Economics 38 (2013) 48-63.
- Simon, S. "Horse Slaughter is Reconsidered." Wall Street Journal, pp. A3. January 2011. November 1, 2013.
- Speer, N.C., G. Slack, and E. Troyer. "Economic Factors Associated with Livestock Transportation." Journal of Animal Science 79 (2001): E166-170.
- Sulzberger, A. G. "Slaughter of Horses Goes On, Just Not in U.S." New York Times. October 23, 2011. November 1, 2013. http://www.nytimes.com/2011/10/24/us/Horse-Slaughter-Stopped-in-United-States-Moves-Across-Borders.html?pagewanted=all&_r=0.
- Vestal, Mallory K., Jayson L. Lusk, Steven R. Cooper, and Clement E. Ward. "What Are the Consequences of United States Government Slaughter Policies on Horse Prices?" 2012. April 30, 2014.
- Whiting, Terry L. "The United States Prohibition of Horsemeat for Human Consumption: Is this a Good Law?" The Canadian Veterinary Journal. November 2007. October 15, 2013. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2034431/>.

APPENDICES

APPENDIX A
RELATED FIGURES

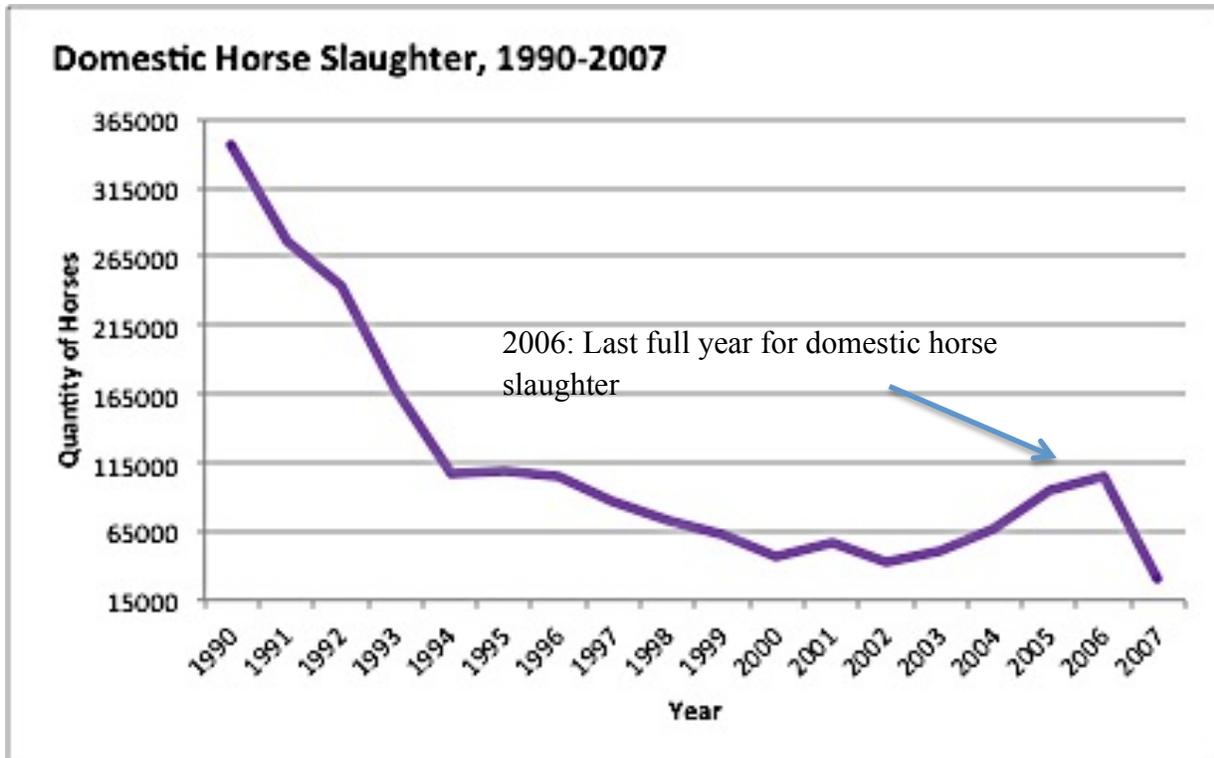


Figure 1. Domestic Horse Slaughter, 1990-2007

Note: All data utilized in constructing the graph above is from the 2011 GOA horse welfare report “Action Needed to Address the Unintended Consequences of the Cessation of Horse Slaughter in the United States.”



Figure 2. Horses Exported for Slaughter, 1989-2012

Note: All data utilized in constructing the graph above is from the Equine Welfare Alliance “US Horses Slaughtered” data, gathered from USDA statistics courtesy of Darrell Charlton, Jr.

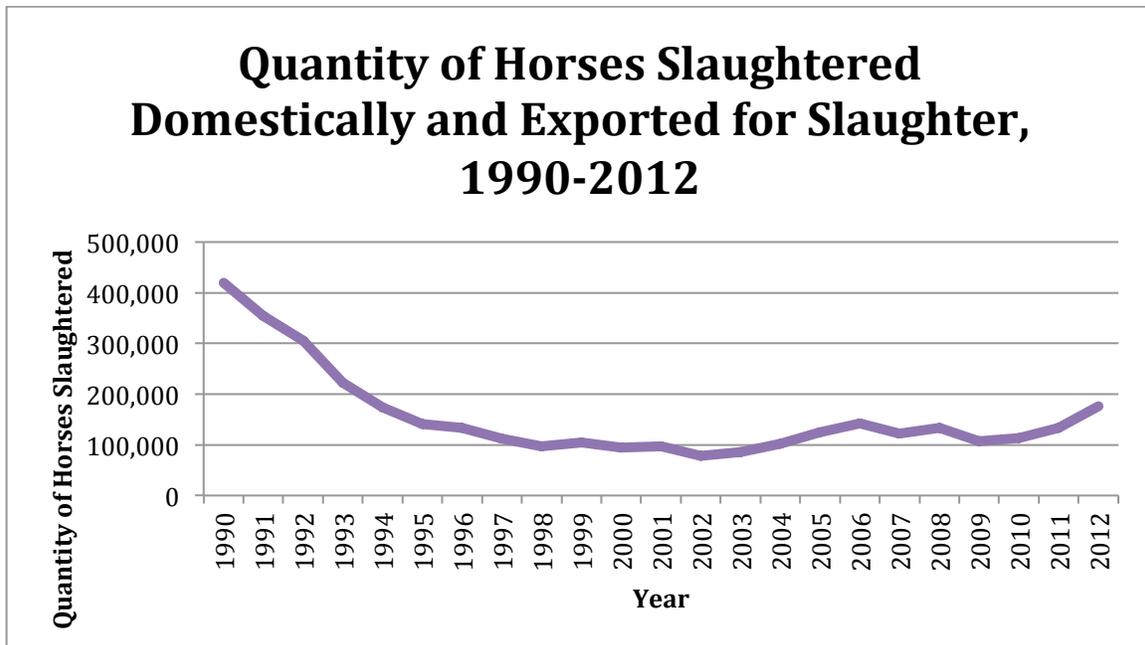


Figure 3 Quantity of Horses Slaughtered Domestically and Exported for Slaughter, 1990-2012

Note: All data utilized in constructing the graph above is from the 2011 GOA horse welfare report “Action Needed to Address the Unintended Consequences of the Cessation of Horse Slaughter in the United States” and the Equine Welfare Alliance “US Horses Slaughtered” data, gathered from USDA statistics courtesy of Darrell Charlton, Jr.

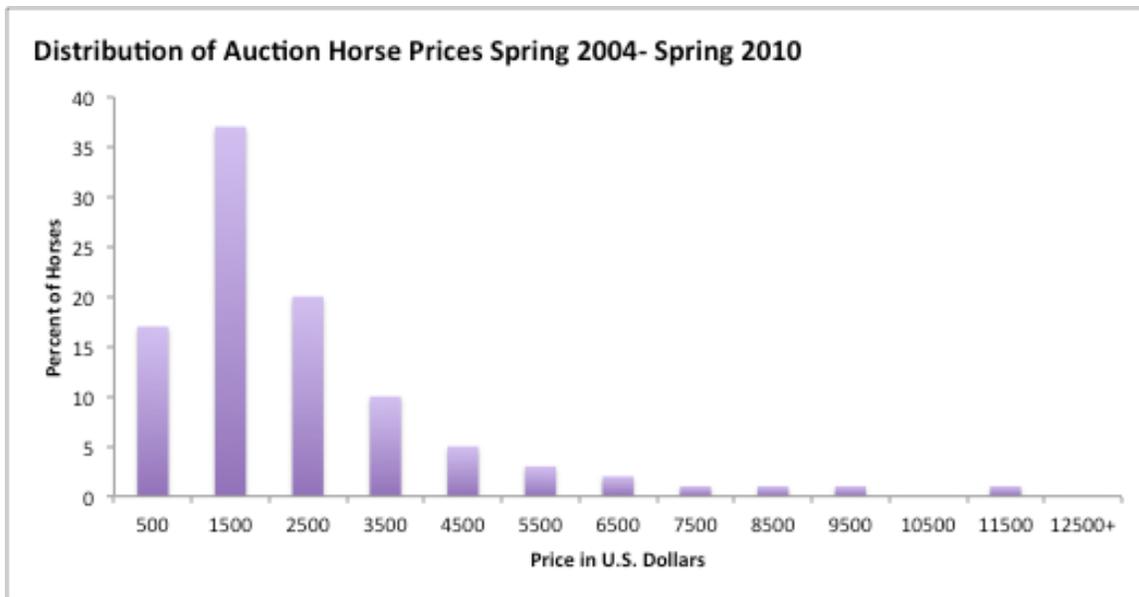


Figure 4. Distribution of Auction Horse Prices, Spring 2004-Spring 2010

Note: All data utilized in constructing the graph above is from the 2011 GOA horse welfare report “Action Needed to Address the Unintended Consequences of the Cessation of Horse Slaughter in the United States.”

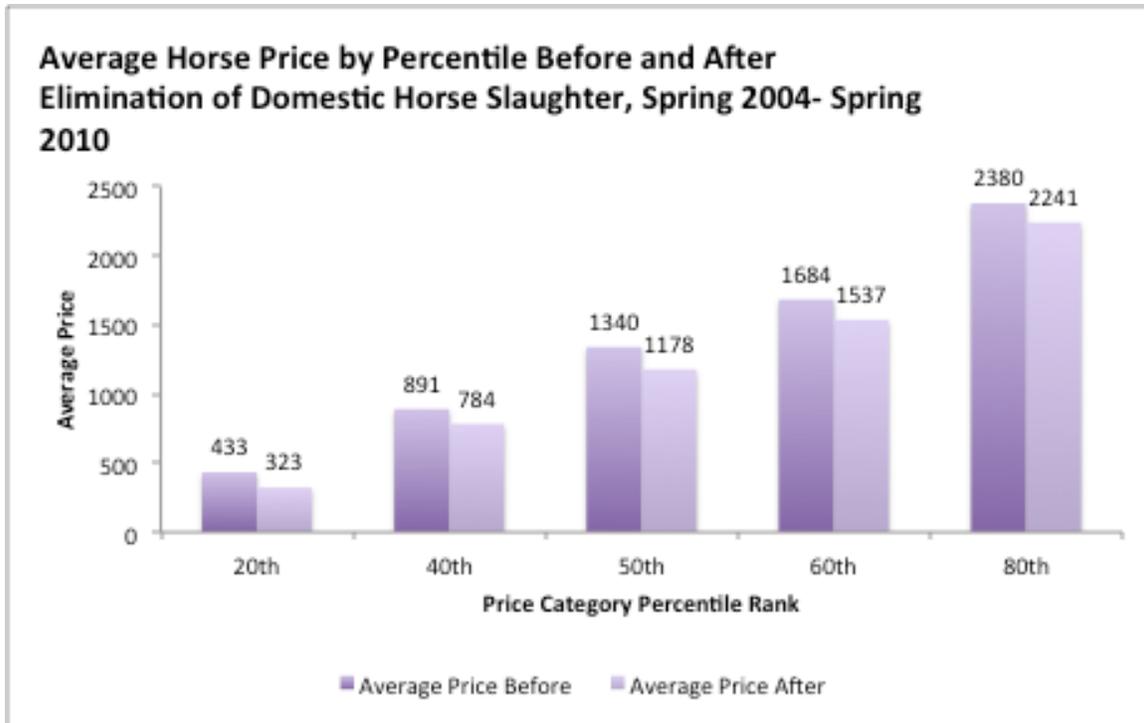


Figure 5. Average Horse Price by Percentile Before and After Elimination of Domestic Horse Slaughter, Spring 2004-Spring 2010

Note: All data utilized in constructing the graph above is from the 2011 GOA horse welfare report “Action Needed to Address the Unintended Consequences of the Cessation of Horse Slaughter in the United States.”

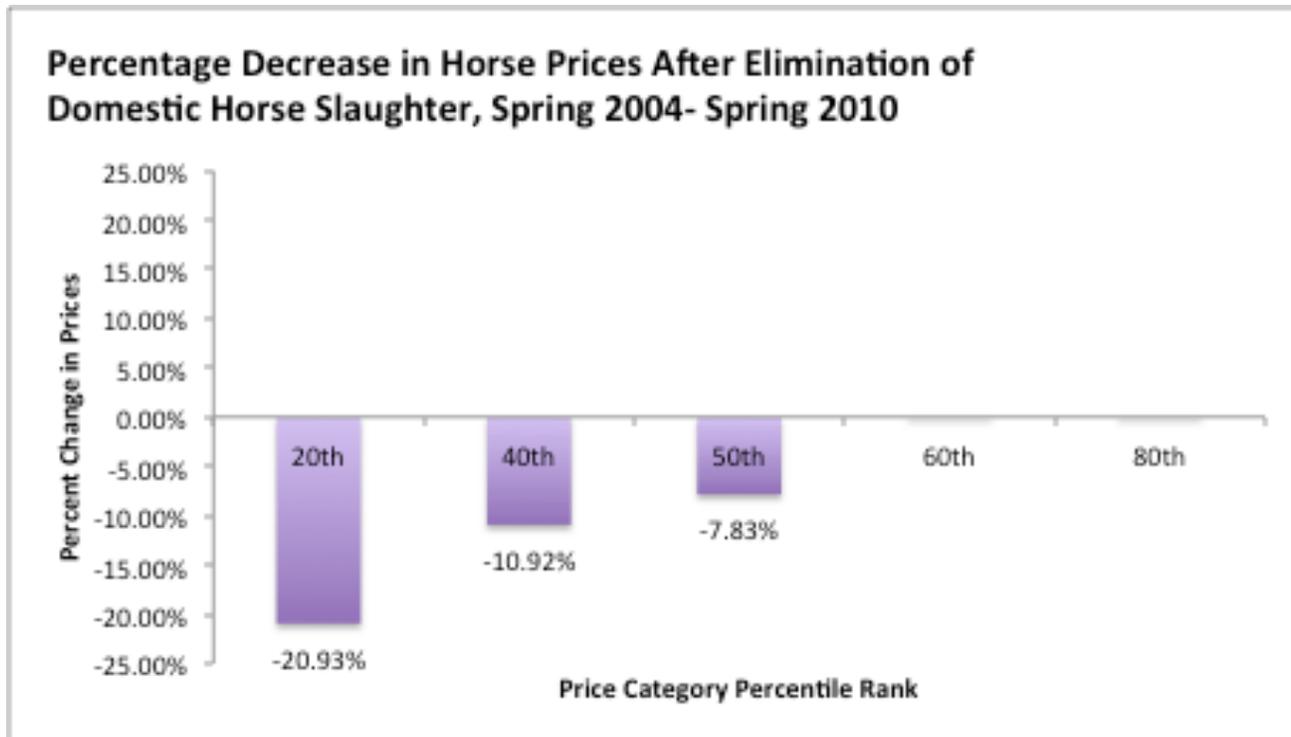


Figure 6. Percentage Decrease in Horse Prices After Elimination of Domestic Horse Slaughter, Spring 2004-Spring 2010

Note: All data utilized in constructing the graph above is from the 2011 GOA horse welfare report “Action Needed to Address the Unintended Consequences of the Cessation of Horse Slaughter in the United States.”

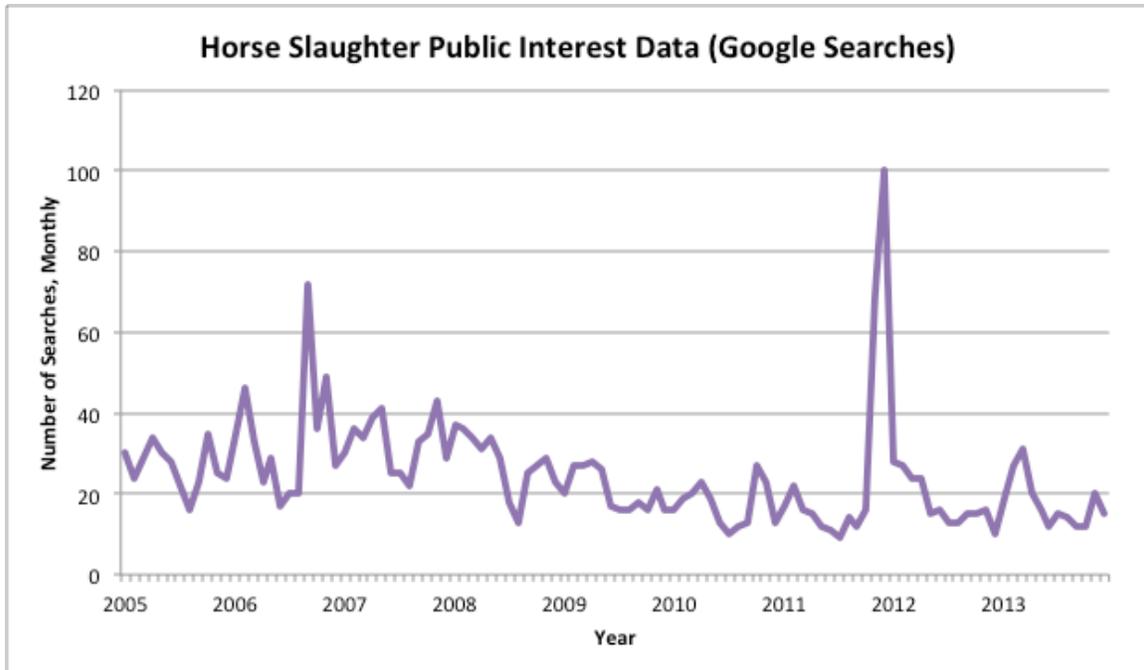


Figure 7. Horse Slaughter Public Interest Data

Note: All data used in constructing the graph above was taken from Google search trends function and entered into Microsoft Excel to form a trend line graph. Topics searched were “Horse Slaughter” and “Horse Meat” and data was collected only for number of searches for that topic per month in the United States.

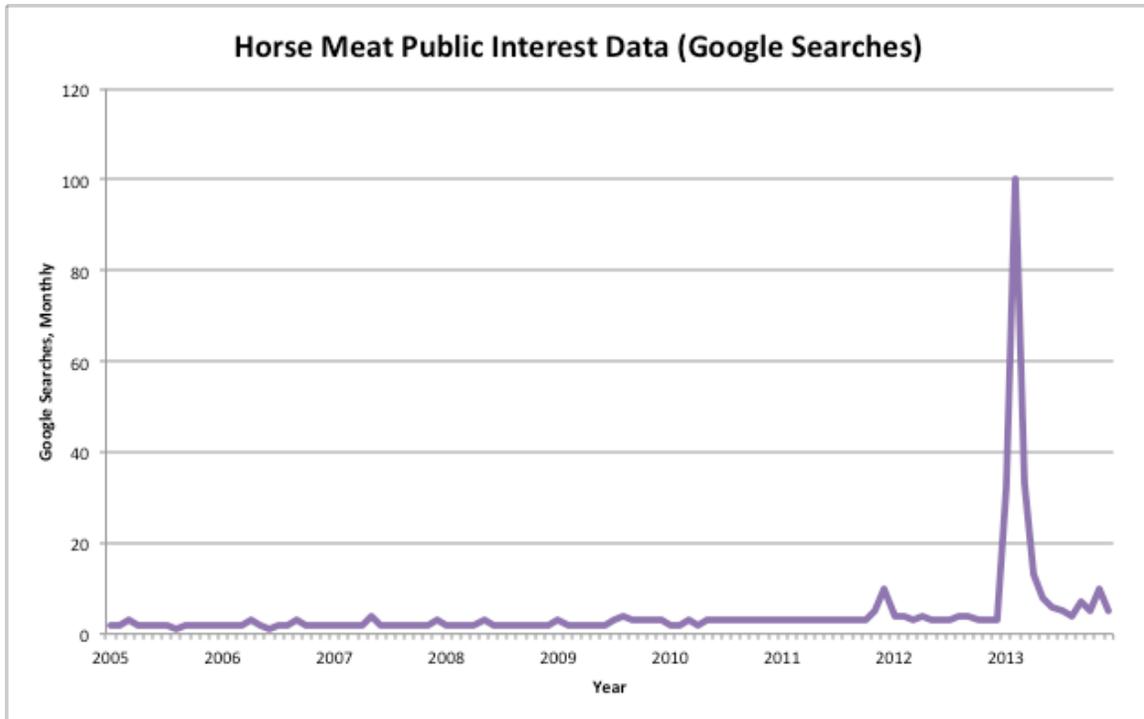


Figure 8. Horsemeat Public Interest Data

Note: All data used in constructing the graph above was taken from Google search trends function and entered into Microsoft Excel to form a trend line graph. Topics searched were “Horse Slaughter” and “Horse Meat” and data was collected only for number of searches for that topic per month in the United States.

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Bachelor of Science, Agribusiness Economics, December 2012

Research Paper Title:

A Review of the Economic Impacts of Horse Slaughter in the United States

Major Professor: Dwight R. Sanders