Hold Your Horses: Addressing the Complex Issue of Wild Horses in America

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Sabine Lazo addresses a problem that is much overlooked by philosophers: the welfare of wild horses. When thinking about animal welfare, most environmental ethicists focus on domesticated animals, whether they are raised for slaughter or as companions in our home. As a result, wild horses are greatly undertheorized in philosophy. She articulates an interesting philosophical problem concerning wild horses, and then attempts to provide a fascinating and controversial solution to that problem. What is the proper way to approach an animal with intrinsic value who, because of environmental conditions we have created, will suffer if left to roam freely and reproduce?

Abstract

Wild horses have existed in the United States since its inception, but their existence and welfare have long been overlooked. The following paper examines the current state of wild horses in the western United States and finds that overpopulation of wild horses is leading to poor conditions for wild horses, environmental damage, and conflict with the interests of nearby humans. The paper examines the biocentric, anthropocentric, and ecocentric approaches to resolving this conflict between wild horses, humans, and local ecosystems, seeking a consequentialism-based solution that bridges the three approaches and maximizes overall welfare.

hen we examine the history of the Americas, there's an unlikely common denominator threading through many different eras and stories. Consider the warfare methods of the first Spanish colonizers, quickly adopted by Native Americans, or the messengers who made it possible for colonists to win the Revolutionary War, or the cowboys of the Wild West, or the first public transport in America's first major cities. You'll find that they all depended on one thing: horses. Horses have long been instrumental in the Americas as a tool for development, and with time, have transcended their already impressive status as a tool for progress to become a symbol for American culture. Even among horses, there is perhaps no breed of horse that is a more famous symbol than the wild horses of the American range. However, today's world is much different from the world of the late 18th to the mid-20th century in which wild horses rose to fame (thanks to Wild West traditions that grew into Hollywood legends). There are many more people and much less grassland available, and what range is left is viciously contested by farmers, ranchers, and wild horse advocates (Lokting, 2020).

By virtue of their sentience and position as a native species, wild horses are commonly acknowledged to have intrinsic value—that is, value that is inherent and does not depend on any external factor; in other words, something that is worth caring about for its own sake. However, this does not clearly settle disputes over land management. Legally, the rangeland belongs to both the wild horses and local ranchers as public grazing land, an arrangement that benefits neither party. Socially, there is much dispute as to how best to care for wild horses while leaving them wild and looking out for the interests of other species. Economically, wild horses are a drain on land resources such as grass and water without much of a tangible return. The intrinsic value of wild horses is not the only value that must be considered when reflecting on the issue of wild horses in North America. In order to achieve a practical solution, we must weigh both the intrinsic and instrumental value of wild horses against the value of human interests and find a solution. This reveals a question that is central to environmental ethics—when the interests of two parties with intrinsic value clash, how do we determine the right

¹ There is some debate as to whether horses are native to the Americas, expanded upon later in the paper. The generally accepted belief is that since horses evolved in the Americas alongside native flora and fauna, they are considered a native species (American Museum of Natural History, 2022)

course of action? In this case, the two parties are wild horses and human interests, with the additional factor of effects on the land and the environment to consider. On one side of the coin, there are ranchers, politicians, and citizens of the area who assert the importance of human interests, regardless of the cost to horses. On the other, there are animal rights advocates and welfare groups who advocate for the welfare and freedom of the wild horses, to the detriment of human interests. The issue is not strictly black and white, however, and there is room for a third option, one which considers the instrumental value of wild horses to benefit both human interests and wild horse welfare, without disregarding the intrinsic value of either party and while respecting the value of land and ecosystems. Although it is a complex issue and there are no perfect solutions, I argue that the wild horse population in North America should be controlled using a combination of hormonal birth control, better-regulated roundups, and creative post-roundup accountability solutions. The criterion of success for which can be judged by a consequentialist analysis of benefits and detriments to all involved parties. These controls are necessary not only for the safety of humans and wild horses but also for the sake of western U.S. environments and economic stability. Essentially, controlling the wild horse population will promote the overall welfare of horses, while also securing the economic interests of humans and thus indirectly promoting human welfare. It will also promote another important value: the intrinsic value of western U.S. environments.

To understand the current predicament of wild horses and the rangeland, it's important to understand the history. Horses evolved in North America nearly 4 million years ago. During the last ice age, the species crossed the land bridge from North America to Asia, where it remained until colonizers landed in North America in the 15th century (American Museum of Natural History, 2022). The American Mustang, referred to legally as a wild horse, was among the first breed to develop after the reintroduction of horses to the Americas catalyzed by Hernando Cortés in 1519 (American Museum of Natural History, 2022). Although Cortés brought only fifteen horses from Spain and only a handful of these escaped into the wild during his campaigns against native cultures, these numbers were supplemented by other Spanish, English, and French colonizers whose horses also escaped and began to crossbreed, form-

ing free-roaming herds (American Museum of Natural History, 2022).² Horses from these wild herds were tamed by various Native American tribes and, through trade, hunting, and warfare, made their way to the western portion of the United States, where they thrived.

By the time colonizers began to make their way to the western regions, there was a plentiful population of various herds throughout the American west, surviving alongside bison on native grasses. When the native bison population was hunted nearly into extinction, the mustang population boomed, thriving because of less competition for food resources. At one point the population peaked at an alleged 2-million horses (American Museum of Natural History, 2021). Then, when cattle ranching became widespread, the population began to shrink again as ranchers fenced off previously open land with the newly invented barbed wire. Many wild horses were also caught and trained as ranch horses, valued for their hardiness.

This competition and population fluctuation continued until the early 20th century, although exact numbers are unknown due to a lack of official population counts. During the World Wars, the mustang population's status as a cultural symbol became less important than their value as a resource for a country struggling under rations. Many horses, domestic and wild, were slaughtered for meat during this time, and although these few years did not make a significant dent in the overall population, it did mark the first time that wild horses were removed from the range entirely for economic purposes (Forrest, 2017). This also marked the beginning of a more anthropocentric⁴ approach to wild horse management. After World War II, there was a resurgence of support for wild horses for their cultural value as an American icon, but an ever-increasing human population placed more strain on land resources, a trend which has continued into the present day (Lokting, 2020).

² Yvette Running Horse Collin's recent research suggests that horses persisted in the Americas up to their alleged reintroduction by the Spanish, but this claim has yet to make significant strides in the archeological community. (Collin, 2017)

³ This belief is widely held, but the original source is difficult to identify. However, the number is cited by several sources, including the American Museum of Natural History, the American Wild Horse Campaign, and the Smithsonian Magazine.

⁴ Anthropocentrism is the philosophical view that humans have an exclusive claim to intrinsic value. Anthropocentric management of environmental ethics issues regards humans as the only parties with intrinsic value but does not necessarily disregard the welfare of other species, it merely places humans as the top priority.

It is also important to understand exactly why the wild horse population must be curbed. It's not as simple as a matter of mere land distribution, although that is the core of the issue. Horses are highly destructive to the ecosystem and require much more land per capita than cattle (Lokting, 2020). This is a perplexing issue. After all, horses evolved here in the Americas, while cattle evolved in Asia, so one would think that horses would be better adapted to the native flora and fauna of America (American Museum of Natural History, 2022). Unfortunately, much of America's grasslands have been taken over by non-native species,⁵ so the grasses horses evolved to coexist with are the exception now, not the rule. These non-native grasses have much shallower root systems, meaning that horses often uproot grass entirely while grazing, which takes much longer to replenish and can even cause irreparable damage to the flora of the area if left unchecked (Masters, 2017). Cattle, on the other hand, don't have top incisors, so they can crop the grass and obtain the resources they need without leaving the land barren. This makes it more efficient to reserve grasslands for cattle, which in turn helps feed the human population—a benefit wild horses currently lack (Lokting, 2020).

Even setting aside the legal and economic conflict over the land for a moment, the amount of land that wild horses require makes them a threat to themselves if unregulated. These herds have no way of knowing how many new horses the next season will support, so if too many foals are produced, the herd is forced to self-regulate—an official term for dying of thirst and starvation (Masters, 2017). Food scarcity also leads to conflict between herds, resulting in fights that can leave horses maimed and unable to fend for themselves.

The horse population also tends to overrun other native prey animals, such as deer, by monopolizing resources (Masters, 2017). It's therefore imperative that we step in and control the wild horse population, not only for the sake of ranchers and our beef supply, but also for native flora and fauna, and the well-being of the horses themselves. However, it is also important to acknowledge the value of wild horses, not only

⁵ The most common nonnative species of flora affecting the impact of wild horses is cheatgrass, an exotic grass with a multitude of negative implications for the rangeland. Cheatgrass is highly flammable and provides little nutrition to any grazers but outcompetes natural grass. (Masters, 2017)

as cultural icons but also intrinsically, as sentient creatures and of the ecosystem. To properly address this wild horse crisis, we must reconcile these two realities and acknowledge that wild horses' intrinsic value does not necessarily entitle them to free reign, as such freedom is detrimental to all involved.

Both the government and activists have sought innovative solutions to the "problem" of the mustang population, the ultimate goals of which vary. The first step towards a unified solution is identifying the criteria by which a solution can be deemed a success. Obviously, effects on the environment must be considered, as well as consequences to beef production, but it is also key to consider the welfare of wild horses, both as individuals and as a population. Over time, many potential solutions have

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been tested throughout the country. One of the longest standing of these is the tradition

of mustang roundups, wherein entire herds are corralled and sorted through, with a select few released back to the range, some funneled into special training challenges, and the majority sold at auctions (Bureau of Land Management, 2022). The roundups are often seen as the perfect compromise—allowing the wild horses that remain wild to live out their lives independent of human control, while still controlling the population. In reality, however, these events are incredibly inhumane and ineffective as currently implemented, and destructive to both the individual horses involved, the local ecosystem, and the economy (Lokting, 2020). Although horse slaughter in the U.S. was banned in 2006, there are no laws prohibiting the export of horses to Mexico or Canada for slaughter, so many of the wild horses rounded up end up in a kill-pen, a U.S. auction house that serves as a "middleman" between U.S. sellers and international slaughterhouse buyers. This essentially means that the United States remains a major contributor to the equine slaughter industry without reaping any of the benefits to the economy or animal welfare that stem from well-regulated domestic slaughterhouses (Grandin, 2013). Additionally, the roundups themselves as currently done have been ruled ineffective by a study from the National Research Council commissioned by the Bureau of Land Management itself (2013). According to the National Research Council, roundups done en masse disrupt the wild horse population's ability to self-regulate and result in higher birth rates in the area the following year, decreasing and in some cases even negating the effect of removing wild horses from the range (2013).

This is not to say that roundups are an entirely implausible solution. When done properly, with restraint and regard for the horses involved and other species that may be affected, they can be an effective way to control wild horse populations (Bureau of Land Management, 2022). However, when horses are removed from the rangeland, there should be accountability for their well-being afterward, adding another layer of complexity especially given the double-edged sword of the equine slaughter ban. If a wild horse is adopted out with the expectation of a domestic life, there should be much more stringent measures in place to ensure they are not sold to slaughter for profit. This is made difficult by the covert nature of the equine slaughter system in the United States; it is one thing to regulate domestic slaughter, but much more difficult to work against the laws intended to stop slaughter from occurring and subvert shipping over borders to slaughter. A much simpler method of population control is preventative, in the form of immunocontraceptive birth control administered to mares, or female horses of foaling age, on the range. The most common form of birth control, a chemical is known as porcine zona pellucida or PZP, is administered via dart gun and can be successfully implanted from a distance as great as 200 yards. It is over 94% effective when correctly implemented and allows the wild horses to continue living their lives mostly unaffected by humans but prevents overpopulation leading to ecosystem destruction or starvation (Turner Jr. et al, 2007). It can also help the overall health of the mares of the herd.

Though there have been no formal studies, anecdotal evidence has shown that excessive Bureau of Land Management roundups and the stress they place on the herd can lead to mares foaling early, some as young as 18 months, which stunts their growth and shortens their life

span⁶ (Pine Nut Wild Horse Advocates, 2019). Birth control combats these adverse health effects and stewardship allows for a more diverse gene pool. In fact, many wild horse groups across the western United States have already begun using PZP on their local herds, with an up to 94% success rate and minimal repercussions or effects on the wild horses' behavior (Turner Jr. et al, 2007).

The use of PZP, or any form of birth control on wild horses, is vehemently opposed by those who believe wild horses should be allowed to live free of any human interference. Although this is an increasingly impossible endeavor as humans encroach on the range more and more, the voices of these activists are still loud in opposition to the practice, backed by philosophers who advocate for sentientist schools of thought such as animal abolitionism. Animal abolitionism, championed by philosopher and author of The Case for Animal Rights Tom Regan, is the idea that animals have rights, including the right to bodily autonomy without interference by humans for the benefit of humans, even if such interference may also help animals. This stance takes a deontological or rules-based approach to the issue, focusing on preserving bodily autonomy over the possibility of prevention of suffering. This is at odds with the consequentialist criterion for success outlined in this paper, which focuses on the maximization of welfare for all involved parties, but nevertheless represents a real obstacle to the widespread use of PZP in wild horses.

Despite the controversy, PZP could prove an incredibly effective solution if fully backed by the government. However, it is a long-term solution, and even if it were fully implemented as soon as this year, it would take several years for the population to balance out and reach ecological equilibrium. So, the question remains: how do we solve the problem of wild horse overpopulation in the short term? This is where roundups and humane euthanasia reenter the discussion. As previously explored, the idea of roundups is not inherently bad but is heavily 6 The Pine Nut Wild Horse Advocates group tracks the behaviors and health of the Pine Nut Wild Horses in Nevada before and after the use of hormonal birth control. They have reported mares foaling as young as 21 months old (foal conceived when the mare was only 10 months old). This particular foal was born deformed and died at 5 months of age, with anecdotal evidence of ties between early foaling and birth defects. The mare is still alive and has since been darted with PZP but did become weak for months following foaling and during nursing. (Pine Nut Wild Horse Advocates, 2019)

dependent on their execution and accountability after the fact. Proper execution of roundups is reasonably straightforward, but accountability requires more creative solutions. Currently, adopters must sign several documents acknowledging risks and affirming that they have adequate facilities for a wild horse. They must also pay a \$25-\$125 fee and sign that they will remain in possession of the horse for at least 12 months, at which point a title of ownership is issued and they have full rights to keep or sell the horse as they wish (Bureau of Land Management, 2022).

It sounds good in theory, but because adopters of an untamed wild horse or burro are eligible to receive a \$1000 adoption incentive within 60 days of adopting the animal, there is a significant amount of corruption and exploitation of these programs (Phillipps, 2021). Several instances have been recorded of ranches adopting as many as 20 horses at a time, collecting their adoption incentives, turning the horses out in a large pasture for a year, and shipping them all to a foreign slaughterhouse upon receipt of the ownership title. All of this is completely legal and costs the Bureau of Land Management millions each year—and this doesn't even encompass those who illegally ship wild horses before their trial year is up, a crime which is rarely punished and sometimes not even recorded (Phillipps, 2021).

This is an opportunity for the Bureau of Land Management and other wild horse management groups to seize control of a situation that has clearly backfired, and manage it to the benefit of the economy, local ecosystems, and the welfare of wild horses. The exploitation of adoption incentive programs is no secret, but as it stands, there is little the Bureau of Land Management can do short of stifling the adoption program. If the ban on equine slaughter in the United States was reversed, domestic slaughterhouses could be reinstated. U.S. standards for livestock slaughter are much more stringent and humane than those of either of our neighboring countries, so while it is difficult to think of slaughter as a moral good, it is, in this case, the lesser of two evils. It would also provide a tangible example of wild horses' instrumental value by contributing to the economy domestically, as large importers of horse meat such as zoos and pet food companies would be shifting their spending from foreign entities to domestic ones. Removing horses from the range also benefits the ecosystem by removing the strain of a burgeoning horse population immediately, providing relief to struggling species of grasses and smaller herbivores (Masters, 2017).

The most difficult part of implementing this plan is convincing the public of its viability. Although horses are federally classified as livestock, many people view them as pets or even a cultural symbol. This often makes it difficult to pass laws that are in the best interest of the species, as people prefer to take a more individualistic approach when animals they consider as individuals are involved. It is not an issue that legislators are keen to address, both because of the controversy involved in addressing it and the fact that as pressing as the wild horse issue is currently, it doesn't get much press, whether positive or negative.

From a philosophical perspective, perception is key in environmental ethics, and it is difficult to emphasize and expand upon the instrumental value of wild horses without undermining public perception of their intrinsic value. Many people, particularly animal abolitionists or those who advocate for non-interference with animals whenever possible, struggle to reconcile the idea of slaughtering an animal with intrinsic value. However, although it seems as if these laws would cause harm to wild horses, they would promote a net benefit for both wild horse and human welfare. Additionally, while the value of wild horses must be considered, they are not the only factor. Adjacent species, especially smaller grazers such as deer and rabbits and struggling species of plants, must also be considered, and of course, human interests cannot be neglected.⁷ Though ethics has no clear answers to offer here between the conflicting views of anthropocentrism, biocentrism, and ecocentrism, philosophy does have the potential, in this case, to bridge the gap between the varying legal, social, and economic solutions if various environmental ethics perspectives are considered.

Other creative solutions have been proposed to address wild horse overpopulation in the short term. Reed (2012) proposes creating dedicated refuges for the wild horses that are unsuitable for adoption to live. She claims that these refuges would be situated to minimize environmental distress caused by the horses and would best acknowledge the intrinsic value of these wild horses. Her idea does have a precedent here in the

⁷ This paragraph addresses the final of the three main approaches to environmental ethics — ecocentrism. Ecocentrists place the utmost importance on the health of the ecosystem as a whole, rather than prioritizing any individual species or group of species. This contrasts with the aforementioned anthropocentric or human-centered thinking and biocentric thinking, which values all living things.

U.S. There are several privately run sanctuaries, including one in Texas owned by Willie Nelson, but perhaps the best model for this idea is the Skydog Ranch and Sanctuary in Oregon, which houses over 130 wild horses and burros on 9,000 acres (Skydog Ranch & Sanctuary, 2019). Each equine is regularly checked for health and happiness, and those with special needs can be medicated and cared for in their top-notch facilities specially designed for wild horses. The facility is inspiring and does incredible work, but it is only made possible by the utter devotion of several employees and copious amounts of fundraising. It is difficult to imagine how this strategy could be implemented on a mass scale without a great increase in government spending, and it is rare to find government jobs that attract workers with the kind of devotion necessary for an endeavor this grand. However, it is another piece to consider in the puzzle that is wild horses in America.

There are dozens more pages to be written about the wild horse situation in all its legal, economic, social, and philosophical complexity,

but it can be summarized as follows: Wild horses have intrinsic value, and their place on the U.S. rangeland should not

Wild horses have intrinsic value, and their place...should not be eliminated for the sake of profit.

be eliminated for the sake of profit. However, unregulated wild horse populations have adverse effects on local ecosystems and the broader economy, and the intrinsic value of wild horses must also be balanced with the intrinsic value of human interests and surrounding land and ecosystems. Wild horses should not be removed from the range entirely, but they should be carefully managed through a combination of immunocontraceptive birth control and safe, accountable roundups. These populations should also be managed post-roundup, whether this is through reinstituting domestic slaughterhouses with stringent welfare standards, enforcing stricter punishments for those who violate adoption contracts, creating more sanctuaries for wild horses to thrive without environmental destruction, or, more likely, some combination of all three of these solutions. There is no clean, simple way to address the issue, but not addressing it will have far more dire consequences for surrounding ecosystems, humans, and the wild horses themselves.







Editor's Note: The wild horses pictured above originate from the East Coast of the United States, and while both East Coast and Western wild horses share similarities, it is important to note that geographical location can create physical differences between wild horses. These horses are Chincoteague Ponies, photographed in Virginia in Grayson Highlands State Park.

Photo Credit: David Cochran, Appalachian Trail through-hiker.

<u>Bibliography</u>

- American Museum of Natural History. (2022). The wild horse, yesterday and today. American Museum of Natural History. Retrieved July 10, 2022 from
- American Museum of Natural History. (2022). The wild horse, yesterday and today.
- American Museum of Natural History. Retrieved July 10, 2022 from https://www.amnh.org/explore/videos/biodiversity/wild-horse-mongolia/article-the-wild-horse-yesterday-and-today
- Collin, Y. R. H. (2017). The relationship between the indigenous peoples of the Americas and the horse: Deconstructing a eurocentric myth (Publication No. 10266897 [Thesis,
 - University of Alaska Fairbanks]. ProQuest Dissertations Publishing.
- de Seve, C. W., & Boyles Griffin, S. L. (2013). An economic model demonstrating the long-term cost benefits of incorporating fertility control into wild horse (Equus caballus) management programs on public lands in the United States. Journal of Zoo and Wildlife Medicine, 44(4s), S34–S37. https://doi.org/10.1638/1042-7260-44.4s.s34
- Forrest, S. (2017, June 8). The troubled history of horse meat in America. The Atlantic. Retrieved May 17, 2022 from https://www.theatlantic.com/technology/archive/2017/06/horse-meat/529665/
- Grandin, T. (2013, April). The Effect of Economics on the Welfare of Cattle, Pigs, Sheep, and Poultry. Dr. Temple Grandin's website. Retrieved July 12, 2022 from https://www.grandin.com/welfare/economic.effects. welfare.html
- Lokting, B. (2020, November 18). In the West, wild horses are a problem and ranchers and animal rights activists are locked in conflict over their fate. Washington Post. Retrieved May 18, 2022 from https://www.washingtonpost.com/magazine/2020/11/18/wild-horses-ranchers-animal-rights-activists/
- Luís, C., Bastos-Silveira, C., Cothran, E. G., & Oom, M. do M. (2006). Iberian origins of new world horse breeds. Journal of Heredity, 97(2), 107–113. https://doi.org/10.1093/jhered/esj020

- Masters, B. (2017, February 7). Wild Horses: The Consequences of Doing Nothing. National Geographic. Retrieved June 16, 2022 from https://www.nationalgeographic.com/adventure/article/wild-horses-part-two
- National Research Council. (2013). Using science to improve the BLM Wild Horse and Burro Program: a way forward. The National Academies Press.
- Philipps, D. (2021, May 15). Wild Horses Adopted Under a Federal Program Are Going to Slaughter. The New York Times. Retrieved July 10, 2022 from https://www.nytimes.com/2021/05/15/us/wild-horses-adoptions-slaughter.html
- Pine Nut Wild Horse Advocates. (2019). The wild horses of the Pine Nut Mountains. Pine Nut Wild Horse Advocates. Retrieved May 19, 2022 from https://wildhorseadvocates.org/
- Programs: Wild Horse and Burro: Adoption and Sales: Frequently Asked Questions | Bureau of Land Management. (2022). BLM website. Retrieved May 18, 2022 from https://www.blm.gov/programs/wild-horse-and-burro/adoption-and-sales/adoption-faq
- American Museum of Natural History. (2021). Protecting Wild Horses | AMNH. Retrieved July 11, 2022 from https://www.amnh.org/exhibitions/horse/an-enduring-bond/protecting-wild-horses
- Reed, C. M. (2012). Enriching the Lives of Wild Horses: Designing Opportunities for Them to Flourish. Environmental Values, 21(3), 317–329. https://doi.org/10.3197/096327112x13400390126019
- Skydog Ranch & Sanctuary. (2019). About Skydog Ranch. Retrieved May 17, 2022 from https://www.skydogranch.org/about-us
- Speir, T. E. (2017, January 20). Mustangs. Texas State Historical Association. Retrieved June 16, 2022 from https://www.tshaonline.org/hand-book/entries/mustangs
- Turner, J. W., Jr., Liu, I.K.M., Flanagan, D.R., Rutberg, A. T. and Kirkpatrick, J. F. (2007), Immunocontraception in wild horses: one inoculation provides two years of infertility. The Journal of Wildlife Management, 71: 662-667. https://doi.org/10.2193/2005-779

United States Environmental Protection Agency Office of Chemical Safety and Pollution Prevention (7505P). (2012). Environmental Protection Agency. Retrieved June 16, 2022 from https://www3.epa.gov/pesticides/chem_search/reg_actions/pending/fs_PC-176603_01-Jan-12. pdf

Student Biography

Sabine Lazo is a junior majoring in Communication Studies and minoring in Philosophy at Sam Houston State University. She takes classes online to facilitate her job as a full-time horse trainer, a passion fueled by a lifetime spent with horses. In her environmental ethics course, Sabine was assigned a research paper on any environmental ethics topic with modern implications. She chose to write about wild horses in the western United States, a topic that inspired further research into the issue. Under the advisement of Dr. Zachary Bachman, a professor in the Department of Philosophy, she continued her research into the ethical dilemmas posed by and possible solutions to the wild horse issue in America. Sabine Lazo will graduate in fall 2023 and plans to pursue a career in communications in the equine industry. She hopes to continue her research on the relationship between ethics and practical solutions in the equine world after graduation.