

‘Wild and Free’ in Climate-Challenged Landscapes

Negotiating the Mobilities of Free-Roaming Horses in the American West

Abstract

The wild horse herds that inhabit the rangelands of the western United States are variously celebrated and reviled within the competing affective regimes that regulate their mobilities. We ask how these mobility regimes intersect with climate change in the governance of ‘pervasively captive’ free-roaming horses. Federal policy’s restrictive-utilitarian regime operates with a political conception of ‘detainable life’ that enables periodic roundups and removals of ‘excess’ horses from the range; detainability, in turn, is enabled by claims that horses are not native to North America. An alternative permissive-convivial approach favored by wild horse advocates defends a vision of free-roaming horses that, in practical terms, rejects considerations of ‘nativeness’ while incorporating forms of management that seek to support their autonomy on the range. Neither regime, however, has adequately considered the survival implications of accelerating climate change in the region. To reflect on the political struggle about the future of free-roaming horses under conditions of pervasive captivity and climate change, we shine a light of multispecies climate justice on herd management practices in Colorado’s Sand Wash Basin and Arizona’s Tonto National Forest.

Keywords: wild horses, pervasive captivity, detainable life, affective mobility regime, multispecies climate justice

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As a warming climate is drying out and heating up the American West, the 'perennial question of who and what belongs in the West' (Martin et al, 2019, p. 227) is being supplanted by the question of who and what, human or nonhuman, gets to survive there at all. In matters of survival, immobility and precarity often reveal themselves as two sides of the same coin for the region's marginalized inhabitants, such as the service workers who cannot find affordable housing within reasonable commuting distance of metro areas and tourism centers. The importance of service workers, however, is generally acknowledged. The right of wild horses to remain on the increasingly climate-challenged lands they have inhabited for centuries is far less settled (O'Donoghue, 2021).

Central to the mythology of the wild horse herds that inhabit the rangelands of the western United States are images of wild horses traveling freely across vast grasslands and high deserts. Representations of wild horses in popular culture perpetuate such tropes of unconstrained freedom, tropes that superficially match the observed lifestyles of wild horses who are by necessity constantly on the move while grazing on sparse forage and traveling to and from sources of water in order to survive in arid grasslands. However, this mythology obscures how the actual lives (and deaths) of ostensibly wild horses are often far removed from the 'wild and free' myth of the American mustang (Philipps, 2017). Like most other nonhuman animals considered wildlife in everyday parlance, free-roaming horses are, in fact, subject to conditions of what Delon (2020) has termed 'pervasive captivity' such that there are always already human-imposed limits on horses' opportunities for movement, along with dependency on human willingness to support appropriate habitat conditions.

Free-roaming horses are variously celebrated and reviled within the competing affective regimes that regulate their mobilities on U.S. public lands. In this article, we seek to understand how these mobility regimes intersect with the slow (and the not so slow) violence of climate change (Nixon, 2011). The federal government's restrictive-utilitarian regime emphasizes wild horses' non-nativeness and their ecological impacts on wildlife habitat and other resource uses to justify periodically gathering 'excess' horses in traumatizing roundups and moving them to off-range holding facilities and private ranches. Federal policy operates with a political concept of 'detainable life' that regulates the circulation of horses' bodies, both on and off the range. Like humans, free-roaming horses may not be killed: they may not be hunted or culled. However, as with some categories of human migrants, their non-nativeness means they may be detained, often indefinitely. Insofar as federal land managers acknowledge the reality of climate change, they invoke its existence primarily to double down on efforts to remove wild horse herds from drought-affected areas, ostensibly to 'save imperiled animals' (BLM, 2021b). In this regime, climate change does the political work of reinforcing wild horses' detainability.

It is against this backdrop of free-roaming horses as detainable (and commodifiable) life that the political struggle about their future is taking place. A permissive-convivial mobility regime championed by wild horse advocates and some conservation scientists resists removals by advancing alternative empirical and normative claims regarding horses' belonging and ecological function on the range (Lundgren et al, 2021; Wallach et al, 2020). Advocates challenge the wisdom of reducing the problem of how wild horses ought to be valued to their nativeness, and campaign for maintaining free-roaming herds in their existing home ranges. However, where the government seeks to make free-roaming horses ostensibly less vulnerable to life-threatening drought by removing herds from the range in unprecedented numbers, advocates too are only just beginning to contend with the survival implications of a rapidly warming climate.

We begin our reflection on the intersection of horse mobility regimes and climate change by explicating the pervasive captivity of western wild horse herds. We then briefly characterize the affective dimensions of the restrictive-utilitarian and permissive-convivial affective regimes, before examining more

closely the politics of wild horse management practices in Colorado and Arizona. The stories we tell here were informed by site visits Jen Britton undertook in her capacity as a wild horse photographer-advocate and by a qualitative analysis of publicly available documents we performed jointly. Following Hamilton and Taylor (2017), we see our human-animal scholarship as amplifying the marginal voices of nonhuman animals in their struggle against the overwhelming power humans wield over them. To this end, we shine a multispecies climate justice light on management practices in Sand Wash Basin, a Bureau of Land Management administered herd management area in northwest Colorado, and in the Tonto National Forest in Arizona where the Salt River wild horses are managed by a public-private partnership. We seek to think through how these practices might better 'account for other beings, with their own radically diverse life projects, capacities, phenomenologies, ways of being, functionings, forms of integrity, and relationalities' (Celermajer et al, 2021, p. 127) in the face of a rapidly changing climate.

Regulating free-roaming horses' mobilities under conditions of pervasive captivity and accelerating climate change

Pervasive captivity in Herd Management Areas

A vision of unfettered wild animal mobilities is a romanticizing myth peddled by wildlife documentaries, which by convention exclude elements of human presence from how animals are presented to viewers (Marris, 2021). However, human-animal studies scholars recognize that zoo animals and wild animals are not, respectively, imprisoned and free, but rather experience different levels of captivity that enable various degrees of meaningful nonhuman animal agency (Blattner, Donaldson and Wilcox, 2020). What is at stake in the 'politics of mobility' (Cresswell, 2010) is the extent to which conditions of 'pervasive captivity' (Delon, 2020) and its various modes of confinement facilitate or impede nonhuman animals' taking control of their own movements, choices, and actions in pursuit of their autonomy and freedom.

The Wild Free-Roaming Horses and Burros Act of 1971 tightly restricts free-roaming horses' herd size and movement opportunities on federal public lands and relies on removal from the range and warehousing in long term storage

facilities as the primary population management tool (Philipps, 2017, p. xxxii). Periodic roundups and removals generate income for rural economies: for the wranglers, helicopter pilots, and shippers who implement roundups, for the farmers who sell hay to the horse storage contractors, and for the growing number of privately owned ranches that receive captured horses for long term warehousing. The roundup process and its aftermath are also traumatizing for both the horses and advocate-observers of these events. Helicopters are used to chase bands into trap sites, forcing both older animals and young foals to struggle to keep up. Once captured in the trap corrals, individuals may continue to panic and deaths and injuries are regularly documented as a result of escape attempts (American Wild Horse Campaign, 2019). Witnesses describe the despair of watching horses fleeing helicopters in fear and experiencing traumatic injury in the capture process, and then seeing family bands sorted and separated into stock trailers and hauled away (Wild Horse Education, 2019).

At least nominally, the 1971 law took the option of simply sending ‘excess’ horses to slaughter off the table, along with other methods of lethal control. By 2016, the BLM holding system for captured horses included ‘sixty private ranches, corrals and feedlots storing forty-six thousand wild horses at a cost of nearly \$49 million a year’ (Philipps, 2017, p. 191). Demand for private adoptions has waned considerably over the years, however, so that, to reduce storage costs, the agency in 2019 implemented an ‘Adoption Incentive Program that provides up to \$1,000 to adopt an untrained wild horse or burro from the BLM’ (BLM, no date). Unfortunately, this program essentially acts as a workaround to the lethal removal and control restrictions, as adopters in the incentive program are selling the horses on to the slaughter pipeline as soon as legally permissible, being paid twice for the horses (Philipps, 2021).

Most of the estimated 100,000 horses who live on federal public lands are confined to herd management areas (HMAs) operated by the Bureau of Land Management (BLM), and, to a lesser extent, to spaces administered by the US Forest Service (USFS) and the National Park Service. Though individual HMAs encompass tens or even hundreds of thousands of acres, many are surrounded by fences. Though fencing is not universal, and can be a porous boundary when it exists, wild horse herds are effectively stationary in these ranges. Like

other types of nature preserves, HMAs 'are heavily monitored, regulated and spatially bounded', and their inhabitants more or less 'confined, controlled and dependent on human agency. That is, they are captive' (Delon, 2020). Delon shows how captivity operates to restrict movement and agency in ostensibly very different spatial configurations by distinguishing between confinement and control. The problem, he contends, is not captivity as such, but how tightly the movements, choices, and actions of the captives are controlled, and thus how much control the captives have over their lives. On this view, HMAs spanning tens of thousands of acres that provide horses access to range, resources, mates, and companions as well as opportunities for play and exploration do meaningfully less violence to autonomy and freedom than holding pens that sharply curtail horses' opportunities to lead self-determined lives (see also Britton and Hunold, 2021).

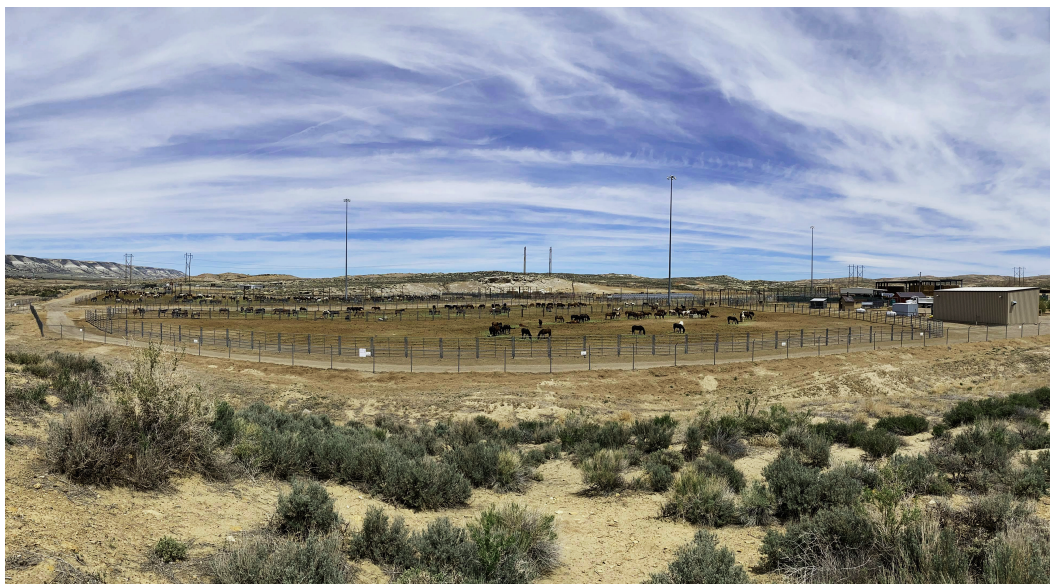


Figure 1

BLM Wild Horse Holding Facility, Rock Springs, Wyoming (© Jen Britton)

Generous range size, however, is not the only relevant factor here. HMAs are not exclusively (or even primarily) intended to benefit horses (Visser, 2017, p. 698). Across U.S. public lands, horses and burros must compete for resources with roughly 1.9 million sheep and cattle (Daily Pitchfork, 2015). In a rapidly warming climate, moreover, the practice of confining most wild horses to HMAs is butting up against persistent drought, frequent wildfires, and increasingly

precarious access to water (Abatzoglou and Williams, 2016; AghaKouchak et al, 2021). Climate is in motion, triggering a wide-scale geographical shifting of ecosystems, populations, species distributions, and plant communities seeking to stay within their preferred environmental conditions (Pecl et al, 2017). Horses confined to HMAs or to designated ranges on USFS lands cannot migrate north or to higher elevations to remain in optimal conditions. The BLM, however, has not integrated climate change science or climate change expectations into its land use planning (Brice et al, 2020), except to gesture at worsening drought conditions to justify a number of recent ‘emergency’ roundups and removals (BLM, 2021b).

Even if the BLM or USFS wanted to alter existing HMA boundaries (they do not), the agencies lack the authority to do so. The 1971 Act defines ‘range’ as the places where a herd or herds of free-roaming horses or burros were found to live at the time the law was passed, and HMA boundaries were established based on those findings. The law also forbids moving herds to public lands outside existing HMA boundaries (BLM, 2006). For rangeland managers, wild horses are a problem to be solved insofar as horses who transgress human spatial orderings constitute unwanted resource competition for ‘native’ wildlife and for livestock grazing on public lands.

Restrictive-utilitarian and permissive-convivial mobility regimes

The restrictive-utilitarian and permissive-convivial mobility regimes vehemently disagree about the legitimacy of roundups and removals as a management tool. Those who oppose the presence of wild horses on public lands label them as ‘feral’ or sometimes ‘invasive’, shorthand for not-belonging and a justification for radically reducing their population (Bhattacharyya et al, 2011). The literature on rangeland management is replete with laments by researchers and managers who view ‘rational’ wild horse management options as limited, with troublesome outcomes for ecosystems (Beever et al, 2018; Danvir, 2018; Davies and Boyd, 2019; Norris, 2018). Damage to vegetation, soils, and riparian areas figure prominently in this research (Danvir, 2018; Davies and Boyd, 2019). But there is also frustration that managers’ options to protect ecosystems are constrained by legislation and public opinion that prevents lethal culling to control populations (Scasta et al, 2018).

Rangeland management researchers theorize various possibilities for controlling the populations of wild horses, if only the public could be won over to their science, and the law's prohibition of lethal control overturned (Norris, 2018). Proposals include allowing unrestricted sale of removed horses and burros to slaughter buyers and, somewhat more imaginatively, killing the horses and burros and feeding them to endangered California condors with the expectation that the animal-loving public would appreciate this boost for the condors (Danvir, 2018). Predation by mountain lions, grizzly bears, and gray wolves may have some potential to serve lethal control purposes, an idea more palatable to wild horse advocates than removal or slaughter. Garrott (2018) notes that presently only mountain lions, who regularly prey on horses where the two species coexist (Andreasen et al, 2021), are documented as sharing space with wild horses. Colorado voters recently approved a ballot measure to reintroduce wolves to the southern Rocky Mountains by 2023 (Machemer, 2020), a policy move with the potential to impact the four HMAs in the state including Sand Wash Basin. Justifications for 1.9 million head of definitively non-native domestic sheep and cattle being an unproblematic presence on public lands generally contend that livestock grazing is actively managed and seasonally rotated. Danvir (2018) at least acknowledges that more hands-on management offers a potential solution for horses too: 'While not currently practiced with wild horses on federal HMAs, practices like herding, water developments, and riparian pastures may offer a means of providing pasture deferment and recovery from horse grazing while still largely maintaining free-roaming herds' (Danvir, 2018, p. 11).

Unlike resource management scientists and public lands managers, the horse-loving public values wild horse herds as part of a cultural rather than ecological legacy (Notzke, 2016). Horses' history of domestication and de-domestication complicates their recognition as wild animals who belong on the land. However, those who regard free-roaming horses as wildlife are not troubled by the 'horse's prominence as a "cultural being"' (Notzke, 2013, p. 402). To the contrary, free-roaming horses' straddling of the domesticated/non-domesticated binary is part of the attraction of contemporary equine wildness, understood to be place-specific and bound up in regionally distinctive ways with an area's cultural history of human-horse relationships (Rikoon, 2006).

People whose connection to these herds ranges from admiring the animals from afar on social media to hands-on engagement on the ground subscribe to a vision of free-roaming horses that rejects considerations of 'nativeness' while incorporating forms of management that seek to support their autonomy on the range (Britton and Hunold, 2021). In this perspective, which values free-roaming horses as 'independent, complete beings with powers and potentials of their own' (Lynch, 2021, p. 8), rangeland management science's commitment to crude methods of population control on the basis of 'rational' ecological criteria looks simply like unjust domination of a nonhuman species.

Visual and narrative storytelling about the lives of individual horses and their families by photographers, filmmakers, and on-the-ground volunteers plays a prominent role in these efforts. Given that herds' daily and seasonal movements occur within a somewhat stable home range, and that herds accustomed to human visitors tolerate their proximity, getting to know the individuals in a particular band requires only an offroad vehicle and time. It is not unusual for horses in more accessible bands to have names and for their family relationships to be known to their followers. A Facebook post by Wyoming-based horse photographer Sandy Sisti describing an unexpected encounter with an aging stallion hints at the depth of these affective entanglements:

Washakie Returns!!

I haven't been posting any pictures of Washakie lately, but that wasn't by choice. Washakie had been keeping a low profile, hanging around with his two bachelor buddies deep in the red point section of the range. Thankfully, my favorite stallion has decided to come out of hiding. Just last week, Washakie left his two pals with Tecumseh and has been trailing the big herd, sparring with bachelors, both young and old. Washakie seems to get a bit of spring fever every year and always joins the big herd for a time. He stays with them until he gets tired of all the young stallions who want to spar with him...those youngsters are relentless! Once he's had enough, Washakie returns to the quiet life with his bachelor band.

I'm not sure how long Washakie will be feeling feisty, but it's so nice to see him strutting his stuff like a young stud. He may be 20 years old, but he's still got it.

For anyone that's not familiar with Washakie, that's a big scar on his left side. He was terribly wounded in 2016 when fighting the stallion, Wapiti, for

ownership of his band. The gash on his side was so big that I thought it would kill Washakie. Washakie lost his band after sustaining that injury, but by some miracle, he survived. I honestly didn't think he would make it, but he's one tough old boy (Wild at Heart Images-Wildlife and Nature Photography, 2021).



Figure 2

Washakie, McCullough Peaks
HMA, Wyoming (© Sandi
Sisti, used with permission)

Horse advocates are keenly aware that the 'tough old boy' might be forced to run for his life, being chased by a helicopter, at any time the BLM decides to initiate a roundup and removal.

Managing wild horse immobilities in Sand Wash Basin and Tonto National Forest

As persistent drought across the American West has created precarious survival conditions for many herds, advocates have stepped in, and through negotiated agreements with BLM, USFS, and state agencies, established practices of provisioning that have sustained herds through climate conditions that would otherwise be deadly. Neither the restrictive-utilitarian nor the permissive-convivial framing of horse mobilities, however, contemplates moving herds

from their present ranges as a way to assure their future, whether by expanding existing management areas or by translocating horses to less forbidding public lands—even though roundups and removals transfer thousands of horses a year to holding pens and privately-owned ranches that, for the most part, assure their physical survival. The American Wild Horse Campaign (AWHC) and other advocacy organizations imagine horses being able to stay where they are, partly because the law leaves no alternatives, but also because advocates' understanding of free-roaming horses' wildness incorporates the idea that herds inhabit a specific home range. Administering Porcine Zona Pellucida (PZP) immunocontraceptive to mares as an alternative method of population control and supplemental provisioning of feed and water seek to alleviate equine vulnerabilities in persistently drought-ridden areas. Advocates point out that resource shortages would be less dire if the horses did not have to share space with 'non-native' but economically more valuable sheep and cattle (Reiswig, 2017). It is unclear, though, whether advocates are thinking about climate change any more imaginatively than the BLM. For example, an AWHC page titled 'wild horses and the ecosystem' does not mention climate at all (American Wild Horse Campaign, 2020). Thus, an expectation of free-roaming herds' indefinite immobility appears to be shared by both land managers and horse advocates. If free-roaming horses cannot access resources because they are limited in how far they can roam, management options include letting nature take its course to permit death by dehydration and starvation, removal, or active management. Of these options, active management of free-roaming horse herds in their present ranges best meets the requirements of multispecies climate justice under conditions of pervasive captivity.

The Sand Wash Basin herd is being sustained by active management from nonprofit advocacy organizations and regional BLM cooperation. Sand Wash Basin occupies 157,730 acres in the arid northwestern corner of Colorado, and wild horse enthusiasts regularly visit to view the horses. The horses of Sand Wash Basin have captured the attention of an engaged advocate community, and social media accounts following the horses and associated advocacy work have tens of thousands of followers. This HMA might be best known as the home of the striking pinto stallion Picasso, who enchanted visitors during his long life (Osborne, 2020). Like the rest of the Mountain West, Sand Wash

Basin has been plagued by drought. Two organizations have forged agreements with the regional BLM office and are authorized to provide various forms of support. The Sand Wash Wild Horse Advocate Team (SWAT) focuses on range quality monitoring and on administering PZP to mares in the herd as a means of slowing population growth and averting roundups and removals. Wild Horse Warriors for Sand Wash Basin has coordinated a major project in collaboration with the Colorado Department of Transportation to authorize and move a portion of the HMA's boundary fence to keep horses away from state highway 318, which has claimed the lives of several horses. The Warriors also do hands-on range and water source management in the basin, including sealing ponds, maintaining and powering well pumps, installing water tanks, and having water hauled in for horses to drink when natural sources run dry. To finance their efforts, the Warriors engage a broad base of supporters through fundraising efforts (Harms Wright, 2021). The group's website conveys the urgency of the basin's water situation: 'We thought the drought of 2018 was bad, this one is starting out worse. In 2018 most of the ponds at least had some water in the early spring. This year most of the ponds are already dry' (Wild Horse Warriors for Sand Wash Basin, 2021a). There is no expectation that these megadrought conditions might improve in the long term (Fountain, 2021), even though a strong 2021 monsoon season brought short-term relief to HMAs across the Southwest.

Despite the efforts of SWAT and the Wild Horse Warriors to reduce the need for roundups through water improvements and PZP-enabled population control, the regional BLM office in September 2021 carried out an 'emergency' roundup that removed most of the 700-plus horses from the HMA. Emergency designations allow the BLM to implement roundups without the normally required public input periods. In its public information about the roundup plan the BLM cited drought conditions: 'This emergency gather prevents impacts to wild horses and the environment due to exceptional drought and lack of forage' (BLM, 2021a). Advocates attended the roundups each day, observing from BLM-approved locations distant from the trap. They reported on the numbers of horses caught and hauled away, deaths, escapes, and the horses' conditions as best they could discern, as the horses ran into the trap ahead of the contractor's helicopter (American Wild Horse Campaign, 2021). The

destination for the removed Sand Wash Basin horses was a holding facility at Colorado's Cañon City penitentiary. Advocates continued to monitor the captured Sand Wash Basin horses, visiting the prison as soon as they were permitted by the BLM (Sand Wash Basin Wild Horse Advocate Team, 2021b), and they have actively shared information on horse adoption processes in the hopes of getting the horses out of the holding pens and into private homes (Wild Horse Warriors for Sand Wash Basin, 2022).



Figure 3

Dry pond, Sand Wash Basin HMA,
Colorado (© Jen Britton)

In Arizona's Tonto National Forest, located in the Sonoran Desert northeast of Phoenix, water for drinking is less of a problem than in Sand Wash Basin, with the Salt River flowing through the wild horse range. Rather, persistent drought has made forage a critical survival issue here, and emergency provisioning consists of a supplemental feed program. The Salt River Wild Horse Management Group (SRWHMG), a nongovernmental organization, has an agreement with the Arizona Department of Agriculture (AZDA) to support the horses, whose shrinking range is less and less capable of sustaining them without this assistance. SRWHMG gained national prominence when, after decades of

efforts by the USFS to classify the horses living in the Tonto National Forest along the Salt River as strays, and therefore exempted from the Wild Free-Roaming Horse and Burro Act's protection, the USFS in 2015 announced plans to remove all of the horses on forest land. An intensive lobbying campaign led by SRWHMG not only got USFS to end their removal plans but also led to a 2016 Arizona law that established a collaboration between SRWHMG and AZDA for ongoing humane management practices (Salt River Wild Horse Management Group, 2012-2020a).

SRWHMG operates various efforts to support quality of life for the national forest's wild horses. Like the Sand Wash Basin volunteer organizations, SRWHMG is fueled by a broad donor base that is bolstered by a high-profile social media presence. SRWHMG provides supplementary hay feeding to the herd during the parts of the year when natural forage in this Sonoran Desert habitat is unavailable or inadequate. SRWHMG also monitors the horses' health and provides care to injured and ill horses when their survival without assistance would be unlikely. The group keeps data on the herd members, administers PZP for population control, performs habitat improvements like removing old barbed wire fencing, and runs a daily road patrol to protect both horses and motorists at the points where horses cross the busy Bush Highway that bisects their habitat (Salt River Wild Horse Management Group, 2012-2020a).

As we have previously explored, people who are interested in wild horses tend to link them to the unique places they occupy (Britton and Hunold, 2021), and photographers routinely show wild horses moving around and through identifiable landscape features in their HMAs and other habitats. Horses, moreover, are valued as individuals. With a natural lifespan of 15 to 30 years in the wild, many individual horses and their social relationships become well known to a horse-loving public. In Sand Wash Basin, water hauling is not just meant to sustain the herd as a whole, but specifically to support Meteor, Ruby, Winchester, and their families. The Highway 318 fence project there is called 'the Van Gogh fence' for the Picasso offspring who was killed on the road. SRWHMG likewise understands its work to be on behalf of the individual horses and family bands that they support (Salt River Wild Horse Management Group, 2012-2020b). In an example of care for individual horses, during the winter of

2021-2022 SRWHMG captured the aging stallion Shadowfax who was slowly starving from an age-related decline. SRWHMG noted in a video update that ‘the word “wild” does not mean: just let them suffer’ (SRWHMG, 2021). Shadowfax now resides in a corral at SRWHMG’s facility adjacent to the wild horse range, with another rescued horse named Batman as a companion, where he is receiving the daily care that will enable him to live comfortably for a few more years.



Figure 4

Fence and access gate, Sand Wash Basin HMA, Colorado (© Jen Britton)

However, as this place-specific investment of care and compassion runs up against accelerating climate change making these places more and more challenging to horses’ survival, there is a tension between a desire to help beloved horses remain in the homes that they know, and the persistent drought that is rendering those homes inhospitable. Wild horses are uniquely immobile compared to other wild ungulates: species like elk, deer, and pronghorn have some capacity to shift their home ranges (assuming an ability to jump over or squeeze through the countless miles of fencing in their path) in response to climate pressure, but horses are relegated to HMAs and USFS ranges that were identified at a time when the impacts of anthropogenic climate change were less severe.

Conclusion

Climate change is acting as a slow-moving tsunami that has begun to break over stationary wild horse herds, bringing worsening environmental conditions that push the horses' resilience past their breaking point. Persistent drought already affects most HMAs in a region suffering from thinning snowpacks, oversubscribed aquifers, and a heating atmosphere. This transformation imperils efforts to preserve free-roaming horses' freedom to control their own movements, choices, and actions under conditions of pervasive captivity, even in spaces where wild horse advocates have pioneered such efforts, as in Sand Wash Basin: 'The drought has done its damage. We have doubts the range can sustain the current number of horses and wildlife throughout the winter, and there is the possibility we could see starving horses. We are telling you honestly what we see out on the range. We wish we had a different message' (Sand Wash Basin Wild Horse Advocate Team, 2021).

Accelerating climate change may require transitioning to more active management of wild horse herds, if these herds are to be kept alive on the range. However, active management only works well for herds inhabiting locations that are accessible to an adequate number of volunteers. More troublingly, perhaps, the persistent standoff between an ever-present threat of impending removals and advocacy for an increasingly untenable status quo obscures exploration of more imaginative alternatives, such as translocation, assisted migration, expanding HMAs, or establishing new ones. Affording climate-challenged horse herds enhanced opportunities for movement is not the direction in which policy is moving. Proposals to enlarge existing HMAs to provide access to nearby rivers or to expand forage opportunities would face determined pushback from private landowners and public-lands ranchers. In response to pressure from agricultural and extractive industries, HMAs are collectively about 36% smaller today than when they were established in the 1970s (Visser, 2017, p. 699), and free-roaming horses are headed for indefinite detention in government-operated holding pens and privately owned off-range pastures in ever-growing numbers.

In the restrictive-utilitarian perspective of rangeland management science and federal policy, free-roaming horses' right to the range is at best precarious,

secondary to the interests of public lands grazing lease holders. In the permissive-convivial understanding of wild horse advocates, in contrast, the horses' belonging is not in question, earned by way of their history of thriving in the region's sagebrush steppes for centuries, often under tough ecological conditions. The lived experiences of particular herds and their cultural significance to human communities, moreover, are deeply entangled with specific places: they are Onaqui horses (Utah), McCullough Peaks horses (Wyoming), and so on. Whatever their shortcomings today, the HMA boundaries drawn in the 1970s did reflect where the horses themselves had chosen to live. There is time, but not a lot, for wild horse advocates and other public lands stakeholders to reimagine how wild horses might continue to lead mostly self-determined lives.

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