



BLM Wild Horse and Burro Program On-Range Branch Highlights

National Wild Horse and Burro Advisory Board Meeting | June 28-30, 2023

The Wild Horse and Burro Program On-Range Branch is primarily responsible for coordinating management of wild horses and burros on BLM public lands, including advising the division chief on on-range management matters, developing and maintaining the annual gather and survey schedules, coordinating transport of animals, managing gather contracts and directing research efforts.

Population: As of March 1, 2023, the BLM estimated there were approximately 82,883 wild horses and burros on BLM-managed public lands. This included 68,928 horses and 13,955 burros. This estimate remains three times the appropriate management level of 26,785 animals and represents a very slight increase of about 500 animals, compared to March 2022. The slight increase in on-range herd size is in line with biological expectations, despite record removals conducted in Fiscal Year 2022.

Heavy precipitation across the West has abated severe drought effects, but wild horse and burro overpopulation is still impacting public lands in many areas. The possible return of drought, and a future hotter and drier climate underscore the urgency of the BLM's work to reduce overpopulation.

Gathers/Removals: In Fiscal Year 2022, the BLM removed a record total of 20,193 wild horses and burros from overpopulated herds across the West as part of its efforts to achieve and maintain appropriate management levels. Efforts to conduct removals in Fiscal Year 2023 were impacted by budget limitations, and the BLM does not typically conduct helicopter-assisted gathers during peak foaling season, March-June. Approximately 650 animals have been removed in Fiscal Year 2023 as of June. The BLM plans to gather and remove approximately 5,606 animals in Fiscal Year 2023, with up to an additional 1,500 spaces reserved for emergency and nuisance removals based on need.

On May 24, 2023 BLM hosted for the third time a virtual public meeting on the use of motorized vehicles for the management of wild horses and burros, as required by the Federal Land Management and Policy Act. By hosting a virtual meeting that encompasses all BLM offices, the BLM is providing the public with a better opportunity to provide comment from the convenience of a computer or phone.

Fertility Control: The BLM continues to work towards implementing more fertility control treatments with the goal of slowing wild horse and burro herd growth, especially for herds that are at or close to appropriate management level. In FY2022, the BLM completed a record 1,622 treatments. In FY2023, the BLM plans to treat 1,541 animals with fertility control methods. This would be the highest ratio of treatments to removals ever.

Many of the fertility control applications in late FY2023 will make use of a new contract that specifically allows for gathering, treating, temporarily holding and then releasing animals back to public lands. Gathering animals for treatment is necessary in herd management areas that are more remote and not generally accessible for darting operations.

The BLM also intends to increase field darting operations, from 645 animals in FY2022, to 826 in FY2023. Field darting can be most effective in accessible herds. The BLM completed its second internal training workshop in early June 2023, that helped train BLM fertility control applicators to hand inject and dart GonaCon vaccine.

Notice Of Funding Opportunity (NOFO): The BLM released a grant opportunity to attract new public and private partners who can help expand on-range operations, including fertility control application,

which closed January 31, 2023. As of the date of this paper, the BLM was reviewing proposals and intends to announce any selected projects.

Population Inventories: Population estimates from reliable aerial surveys and ground counts are essential for herd monitoring and management decisions. The BLM aims to conduct reliable surveys of about 1/3 of the HMAs every year, on a rotating basis. In FY2022, the BLM used the statistically validated ‘simultaneous double-observer’ method of data recording in aerial surveys over 79 herd management areas (HMAs) and 10 herd areas (HAs). In FY2022 there were also 3 ground-based surveys in HMAs where almost all the horses are individually catalogued and identifiable; in most of those HMAs, BLM works with and relies on help from volunteer groups to obtain those annual counts. The aerial and ground survey efforts in FY2023 are comparable in scale to FY2022.

Research: The BLM Wild Horse and Burro Program 2021 Strategic Research Plan identified research into humane, long-lasting mare fertility control methods as the highest priority for funding. The next highest priority was to address the relationship between wild horses and burros and their environment, including as related to climate change. In April 2023, the BLM issued a final EA, decision record, and finding of no significant impact authorizing two fertility control projects, which started in May 2023. One project will test the strength of immune response and contraceptive effects of various formulations of oocyte growth factor vaccines. The other project will test the efficacy of SpayVac PZP vaccine treatments given in the neck or gluteal muscles. The third project was not authorized; it would test the efficacy and behavioral outcomes of a type of intrauterine device. Since January 2023 the BLM is also supporting a laboratory project aimed at developing of molecules that could limit fertilization by disrupting the Juno protein.

Since the fall of 2022 the BLM has been supporting two new projects that address ecology and climate change. In one, the US Geological Survey will model the effects of wild horse and burro density, livestock use, and environmental covariates on wildlife and vegetation throughout the geographic range of BLM-managed wild horses and burros, then use those results to forecast the effects of future climate change. In the other, Utah State University and the USDA Agricultural Research Service will use environmental covariates and wild horse and burro locations from aerial surveys to model the quality of current and projected future horse and burro habitat quality. Since the Board’s meeting in Phoenix, the USGS has published several papers related to previously funded research, including methodology for the PopEquus cost and population projection model.

PopEquus: The U.S. Geological Survey and the Bureau of Land Management in March released a new modeling program, *PopEquus*, designed to predict the potential outcomes of using various non-lethal methods to manage and protect wild horses roaming public lands. The Free Roaming Equid and Ecosystem Sustainability network hosted free public webinars on April 5 and 25 to demonstrate *PopEquus* and answer questions about the model. The webinar featured scientists from the USGS and BLM who helped develop the tool.

PopEquus is open-source and uses peer-reviewed information to model expected outcomes for a given population of wild horses and the cost associated with that outcome. The model can project, for example, what the population size of a given wild horse herd will be after 10 years using a fertility-control vaccine to prevent pregnancy in a proportion of mares, as well as the expected cost. BLM managers can use this information to compare different possible management strategies. To access the PopEquus user interface, [visit the USGS web site](#).