

Dear WHAGR Institute,

I am writing to express my unwavering commitment to participating in the "Ma'amin: Unveiling the Legacy of the Celestial Horse" documentary, organized by my colleagues at World Heritage Animal Genetic Resources Institute. As an Emeritus Professor in the Department of Veterinary Integrative Biosciences at the College of Veterinary Medicine and Biomedical Science, Texas A&M University, I am delighted and honored to lend my expertise and knowledge to this important cinematic endeavor.

Having followed the efforts of WHAGR in conserving and protecting critically endangered domesticated animal breeds with invaluable genetic heritage, I am quite happy to be a part of this documentary. With my extensive experience and research focus on equine genetics and conservation, I am deeply passionate about the mission of preserving the genetic legacy of the celestial Ma'amin horses (CJHA).

Throughout my career as an academic and researcher, I have dedicated myself to advancing the understanding of equine genetics and its implications for the health and well-being of horse populations worldwide. My work has centered on studying genetic diversity, breed characterization, and conservation strategies for rare equine breeds. Participating in the "Ma'amin" documentary provides an invaluable opportunity to share this knowledge with a broader audience and raise awareness about the importance of preserving genetic heritage.

As an Emeritus Professor, I remain committed to promoting scientific knowledge and fostering a deeper appreciation for the unique genetic traits present in the Ma'amin horses. I believe that documentaries like "Ma'amin" have the potential to inspire positive change and conservation efforts, not only for these celestial horses but also for endangered animal breeds across the globe.

I am eager to work collaboratively with the esteemed media team and fellow experts involved in the documentary. I am fully dedicated to contributing my insights and expertise through interviews, discussions, and on-screen appearances, as well as offering scholarly guidance and support throughout the production process.

Please find enclosed my resume and this letter of commitment, affirming my dedication and enthusiasm to be part of the "Ma'amin: Unveiling the Legacy of the Celestial Horse" documentary. I am genuinely excited about the impact this project can have in promoting the critical work of WHAGR and raising awareness about the conservation of endangered animal breeds.

Thank you for considering my involvement in this meaningful venture. I am looking forward to collaborating with you and the entire team to create a captivating and educational documentary.

Sincerely,

A handwritten signature in black ink, appearing to read 'E. Gus Cothran'.

E. Gus Cothran, PhD

6 August 2023

To: World Heritage Animal Genetic Resources Institute (WHAGR)  
From: Dr. Jeffrey MB Musser  
Subject: Participation in "Ma'amin: Unveiling the Legacy of the Celestial Horse" documentary

I am writing to express my wholehearted commitment to participate in the "Ma'amin: Unveiling the Legacy of the Celestial Horse" documentary, organized by the World Heritage Animal Genetic Resources Institute (WHAGR). As a Clinical Professor at Texas A&M University and a dedicated veterinarian, I am honored and excited to contribute my expertise and knowledge to this significant project,

This Project underscores the accomplishments of WHAGR in preserving endangered domesticated animal breeds with invaluable genetic heritage. I find the opportunity to be involved in this project, and the documentary, both professionally and personally fulfilling. As a large animal veterinarian with a focus on research and education not only in the US but internationally – 30 years with international livestock and equid veterinary medicine experiences, I strongly believe in the importance of preserving and understanding the genetic diversity of domesticated animals, especially such rare and culturally significant breeds as the Ma'amin horses.

Throughout my professional career, I have conducted extensive research and practical work in large animal health, management, and conservation. My experience in veterinary medicine, combined with my passion for animal welfare and preservation, aligns perfectly with the themes and objectives of the "Ma'amin" documentary. I am committed to sharing my expertise and insights to shed light on the health, well-being, and conservation efforts concerning the Ma'amin horses.

Furthermore, as an educator at Texas A&M University, I have had the privilege of mentoring and inspiring future veterinarians. I firmly believe in the power of information and knowledge dissemination, such as in media and documentaries, to educate and engage audiences in critical issues. It would be an honor to contribute to this project by providing valuable information and scientific perspectives on the challenges and opportunities in preserving the genetic legacy of these celestial horses.

I am looking forward to collaborating with a wide range of scientific professionals, and especially eager to collaborate with the talented media team and experts involved in the documentary. As a representative of the large animal veterinary community, I am committed to actively participating in interviews, discussions, and on-screen appearances. My goal is to contribute to the success of the documentary and support WHAGR in its essential mission of safeguarding the genetic heritage of endangered animal breeds.



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July 30, 2023

Letter of Commitment to Participate in "Ma'amin: Unveiling the Legacy of the Celestial Horse" Documentary

Dear WHAGR Institute,

I am writing on behalf of Fort Ross Conservancy (FRC) to express our enthusiastic commitment to participate in the production of the documentary "Ma'amin: Unveiling the Legacy of the Celestial Horse." We are honored to collaborate and support your efforts to unveil the history and heritage of the nearly extinct Ma'amin horse, whose legacy is deeply intertwined with the history of the Pacific Northwest, as well as the Eurasian landmass and the interactions between First Nations, representatives of European powers, and the emerging American nation.

FRC is a well-respected organization with a significant focus on historical and cultural preservation, education, and cross-cultural exchange. As the co-manager of Fort Ross State Historic Park, we have been steadfast in our dedication to promoting and preserving the rich history of the region, which includes our expertise in organizing and managing multidisciplinary humanities projects that bridge the United States and Russia.

We are delighted to have our esteemed resident historian, Igor Polishchuk, as an important member of this significant project. Igor has demonstrated exceptional expertise in organizing and leading historical research and collaboration across Eurasia and North America. His successful execution of numerous projects has earned him a reputation as a seasoned professional in this field.

Igor Polishchuk's involvement in the documentary will be instrumental in organizing historical research between relevant experts and organizations on both continents. With his guidance, the documentary will delve deep into the captivating story of the Ma'amin horse, exploring its significance in shaping the cultural, social, and economic landscape of the region.

We firmly believe that this documentary has the potential to foster greater understanding and appreciation of the historical connections between these regions and their shared heritage. By shedding light on the Ma'amin horse's legacy, we hope to contribute to a broader appreciation of cultural diversity and promote dialogue among communities with different backgrounds.





College of Agriculture  
Food and Natural Resources

University of Missouri-Columbia

April 1, 2016

Division of Animal Sciences  
University of Missouri  
S135B Animal Sciences Center  
920 East Campus Drive  
Columbia, MO 65211-5300  
Phone: 573 884-4946  
E-mail: taylorjerr@missouri.edu

Monterey County Board of Supervisors

Re: World Heritage Animal Genomic Repository & Veterinary Institute Global Biodiversity Initiative

To Whom it May Concern:

This letter is to indicate my strong support for the establishment of the World Heritage Animal Genomic Repository & Veterinary Institute (WHAGR & VI) in Monterey County, California for the reasons that I shall lay out momentarily.

But first allow me to first introduce myself. I am a Curators' Distinguished Professor of Genetics and Animal Sciences in the College of Agriculture and Natural Resources (CAFNR) at the University of Missouri. I also hold an endowed chair, the "Wurdack Chair in Animal Genomics" which was initiated by a gift from the Wurdack family to generate two Endowed Chairs in CAFNR many years ago. I am an elected Fellow of the American Association for the Advancement of Science and am the 2008 Celebration of Excellence Distinguished Researcher, 2011 Frederick B. Mumford Outstanding Faculty Member and 2013 Outstanding Graduate Mentor/Advisor Awardee in CAFNR. I am also the 2012 Graduate Professional Council Gold Chalk, 2013 21st Century Corps of Discovery Awardee, 2014 President's Faculty Awardee for Sustained Career Excellence and an 2014 University of Missouri 47th Annual Faculty-Alumni honoree. I am a member of the Bovine Genomics Consortium which developed the Illumina BovineSNP50 assay for which we won the 2008 USDA Technology Transfer Award, the 2009 FLC Award for Excellence in Technology Transfer and the 2010 USDA Secretary's Honors Award. In 2013, I received the American Society of Animal Science's Rockefeller Prentice Memorial Award in Animal Breeding and Genetics and the Beef Improvement Federation's Continuing Service Award. I have received over \$41 million in competitive research funding as PI or co-PI, have mentored 14 postdoctoral fellows and have chaired 47 M.S. and Ph.D. students. Along with my collaborators and graduate students I have authored 220 peer reviewed research articles, 5 book chapters, 3 patents and I have edited one book. My Google Scholar h-index is 51 and my publications have been cited 11,812 times (<https://scholar.google.com/citations?hl=en&user=LyroTjAAAAAJ>).

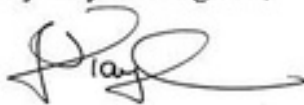
Much of my work has focused on elucidating the evolutionary relationships among the world's cattle breeds to understand the impacts of human domestication, breed formation and selection upon the genome of this species. My group has published two very significant manuscripts describing the relationships between 134 of the world's 800+ breeds of cattle (Decker et al. 2009, *PNAS* 106:18644, 139 citations; Decker et al. 2014; *PLoS Genet* 10:e1004254, 50 citations) and we have also recently described the origins of a unique population of cattle on Chirikoff Island in the Gulf of Alaska (Decker et al. 2016, *Heredity* doi: 10.1038/hdy.2016.7). More explicitly, we have demonstrated the enormous impact that human domestication and breed formation has had on the loss of diversity and

enrichment of deleterious alleles in modern domesticated breeds (Decker et al. 2012, *BMC Genomics* 13:606, 17 citations; Ramey et al. 2013, *BMC Genomics* 14:382, 27 citations; Marsden et al. 2016, *PNAS* 113:152, 3 citations). What these studies show is that an enormous amount of variation was lost when cattle were domesticated and then the remaining variation was subdivided into breeds which share much common variation but also harbor a great deal of rare variation that is breed specific. As breeds lose favor and become less numerous, this rare variation is lost forever due to the processes of genetic drift and extinction. The need to preserve these rare populations is based on the need to preserve diversity that will likely become more important to agriculture as the world's climate begins to change and the breeds that are currently widely utilized become less and less well adapted to the warmed conditions. The Chirkoff Island population presents a great case study. We have shown that this population originated with Yakutian cattle brought by early Russian settlers and traders and that these cattle were subsequently crossbred with British breed cattle (Hereford in particular) brought from the US at least 60 years ago. The current population is as distinct as any other recognized breed of cattle and very likely contains variants that have been selected to confer adaptation of these animals to survival in austere conditions without veterinary intervention or reliable sources of foodstuffs. Despite this it is very likely that US Alaska Maritime National Wildlife Refuge will eradicate the cattle population on Chirikoff Island to assist protect the indigenous bird populations on the island. Many of us believe this to be dreadful loss of biodiversity and this is but one of countless such examples.

The case for preserving the biodiversity of rare agricultural breeds is well established and I believe that Monterey County is a most desirable location to center the WHAGR & VI for several reasons. First, the proposed site has sufficient agricultural lands to support the initiative and the site offers appropriate biosecurity which is essential for the long-term survival of both the animals and the repositories harboring cryopreserved embryos, semen and tissues. Second, the initiative will require broad public support both financially and culturally which again argues for California and the Monterey region. This also includes access to significant university and other research facilities nearby such as Cal State University at Monterey Bay and the Monterey Bay Aquarium Research Institute which will provide opportunities for collaboration and research synergies. Finally, the initiative requires a site that desirable as a place to live and work and that has ready access to a large regional airport to attract the best scientists to the area to support the project's initiatives. For these reasons, the case for locating the WHAGR & VI in Monterey County is irrefutable.

Please contact me at 573) 884-4946 or at [taylorjerr@missouri.edu](mailto:taylorjerr@missouri.edu) if I can provide you with an additional information.

My very best regards,



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Jeremy Taylor  
Curators' Professor of Genetics and Animal Science  
Wurdack Chair in Animal Genomics  
Fellow, American Association for the Advancement of Science



# Wild Horse Sanctuary

P.O. Box 30 • Shingletown, CA 96088

Telephone & Fax (530) 335-2241

February 1, 2007

Charles Tyson, Program Director  
California Farmland Conservation Program  
California Department of Conservation  
801 K. Street, MS18-01  
Sacramento, CA 95814

Dear Mr. Tyson:

The Wild Horse & Burro Sanctuary, Inc. is pleased to describe its experience with Birchwood Farms Conservancy's unique capabilities for protecting and preserving endangered domestic species.

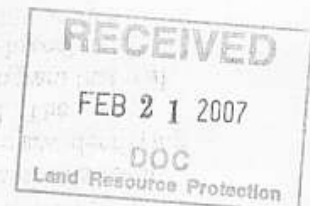
In the past year, we have had the privilege to work with Birchwood Farm Conservancy on a preservation effort and a conservation plan for a population of very rare horses once indigenous to Santa Cruz Island, one of the Channel Islands off of the California coast. Through the guidance and resources of Birchwood Farm Conservancy we are identifying the genetic building blocks needed to ensure a future for this horse breed. The Conservancy is also working with us to develop a long term breeding program that will reestablish sufficient diversity within the population without altering the breed's distinctive attributes. Although it is too soon to know whether we will ultimately be successful in reestablishing a population of Santa Cruz Island horses, it is clear to us that without Birchwood's support and expertise, we could not undertake this endeavor, and an amazing slice of California's genetic history would be forever lost.

We believe that Birchwood Farm Conservancy presence in California will enhance diversity in our State's agricultural sector. Moreover, Birchwood's operation on land protected by a farm land easement will serve as a model for conservation in agriculture. The Wild Horse Sanctuary welcomes Birchwood Farm Conservancy to Shasta County California and hopes that the California Farmland Conservation Program will embrace this opportunity to support conservation on multiple levels.

Sincerely,

Dianne Nelson

DN/gc



*Protecting and Preserving Freedom for America's Wild Horses*



## TEXAS A&M UNIVERSITY

College of Veterinary Medicine & Biomedical Sciences  
Department of Veterinary Integrative Biosciences

**RECEIVED**

DEC 19 2006

DOC  
Land Resource Protection

December 12, 2006

Charles Tyson, Program Director  
California Farmland Conservation Program  
California Department of Conservation  
801 K Street, MS18-01  
Sacramento, CA 95814

Dear Mr. Tyson,

I am writing to let you know that I fully support the work of Birchwood Farms Conservancy (BFC) in their efforts to conserve a variety of domestic animal species and breeds. I have been involved in rare breed conservation since about 1990 (mainly with horses) and have worked with The American Livestock Breeds Conservancy and with FAO in breed conservation. I recognize the critical importance of having individuals actively involved with preservation of breeds on the farm. I have worked with BFC since 1995 on international conservation efforts. Such projects are important since in many cases they represent the only chance of survival of the breeds involved. The establishment of a Conservation farm would allow the expansion of work in breed preservation efforts including such things as increasing the herd size of breeds, increasing the number of breeds and preservation of more diverse types of breeds. The conservation easement establishment of this ranch would be, to my knowledge, the first where conservation of farmland and preservation of endangered heritage breed animals and plants could coexist and educate the public on a face to face basis about the stewardship of farmland, animals and plants. This type of effort is of great importance in ensuring the survival of the domesticated species that are so much a part of our cultural inheritance. Please let me know if there is any other information that you would like from me.

Sincerely,

A handwritten signature in cursive script, appearing to read "E. Gus Cothran".

E. Gus Cothran  
Clinical Professor



Texas Veterinary Medical Center  
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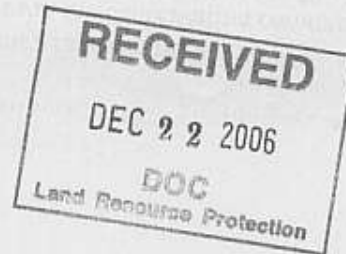


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fax [530] 342.0257  
nature.org

December 21, 2006

Charles Tyson  
Program Director  
California Farmland Conservation Program  
California Department of Conservation  
801 K Street, MS 18-01  
Sacramento, CA 95814



**Subject: Support for Birchwood Farm Conservancy**

Dear Mr. Tyson:

I understand the Birchwood Farm Conservancy is hoping to move from Kentucky to Northern California and there is a funding request that has been submitted to your department.

I have been advising the Birchwood Farm Conservancy for the past couple of years and I am writing in support of the funding request. Many of us in the conservation community would like to see the Birchwood Farm Conservancy set up shop in Northern California. Their mission of preserving the genetic diversity of domesticated plants and animals nicely complements our mission of preserving natural biodiversity. In fact, I am not aware of anywhere else in the world where there has been a marriage of these two missions. If the Birchwood Farm Conservancy locates on a property that is protected by a conservation easement, this may establish a new model for preservation of native wildlife and agricultural species on the same site. Such a model would send a message that wild and domesticated species can be protected side-by-side – an important message in an increasingly crowded world.

Hopefully, as a result of funding from the CFCP, Birchwood Farm Conservancy will be able to move their operation to the 380-acre Anderson property on Bear Creek, or elsewhere in Northern California.

The Nature Conservancy enthusiastically supports the funding request from the Birchwood Farm Conservancy.

Sincerely,

Jake Jacobson  
Lassen Foothills Project Director

cc: Birchwood Farm Conservancy

