

# Managing Wild Horses and Burros on Range



Wild Horse & Burro Volunteers

*Be Part of the Solution!*

## A Resource Guide for Advocates

*Compiled by The Cloud Foundation*

Contributors (*listed alphabetically*): Jared Bybee, John Cline, Kimberly Frank, Linda Hanick, TJ Holmes, Ginger Kathrens, Dr. Jay Kirkpatrick, Mike Paulick, Sandra Sell-Lee, Stella Trueblood, Dr. John Turner, Aleta Wolf, and many other BLM employees and citizen scientists who advocate for good management of America's wild horses and burros.

# DEDICATION



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## **Be Part of the Solution!**

Wild horses have inspired and educated me for over 20 years. Their message to me has always been remarkably clear--- help us live our lives in freedom with our families.

This Guide that so many have spent so much time creating represents a way to do just that; allow our precious wild horse families to stay in their homes where they are safest and happiest.

The alternative of sending more mustangs into permanent incarceration may be a death sentence. Killing wild horses in holding has been proposed as a solution. This guide attempts to offer the humane alternative. To succeed it will take you!

-Ginger Kathrens

## FORWARD

*From Sandra Sell-Lee, director of volunteer programs, The Cloud Foundation*

**TASK:** Create an opportunity for wild horse and burro advocates to volunteer in the BLM on-range management of each of America's wild horse and burro herds.

**STEP ONE:** Identify processes within which community advocates can participate in on-range management of our wild horse and burro herds.

**STEP TWO:** Engage, Educate, Enable and Empower advocates to be able to accomplish the myriad of "boots-on-the-ground" tasks in support of local BLM management.

**STEP THREE:** Provide a resource manual where advocates can find answers to their questions about "Everything you ever wanted to know about managing wild horse and burro herds on the open range."

The intentions of the Resource Guide:

- provide an overview of the entire on-range management process,
- feature subject matter experts to speak to their areas of expertise and experiences,
- provide links to resources and references, and
- provide contact information to other advocates, BLM volunteers and BLM field staff already working in the field who are willing to encourage and coach people new to this work environment.

**RESULT:** "A RESOURCE GUIDE FOR MANAGING WILD HORSES & BURROS ON RANGE." A guide by wild horse and burro advocates, for advocates.

**IMPORTANT ASSUMPTIONS:** First and foremost, each wild horse or burro herd running free on U.S. public lands is UNIQUE and one of a kind. Each herd has its own character, genetic codes, unique markings, history, type of range. Each BLM Herd manager has the responsibility to direct, approve and oversee all volunteer activities.

Therefore,

1. This Resource Guide is merely a source of information for advocates who may be looking for ideas or best practices of how to do something or where to go for more information.
2. This Resource Guide is NOT intended to be a template for all herds. Each herd manager and group of local community advocates will have to find their own solutions for how best to serve their herds based on their unique current situation.
3. The vision is the same for all, and its successful achievement will depend solely on the decisions and actions of each local self-managed work team, led by the herd's BLM field manager.

Finally, this Resource Guide is a "work in process," and we will always encourage people – advocates and BLM – to suggest changes, improvements and innovative ideas.

To local herd management groups: Make this resource guide your own. Make it work for you. Use it to train newcomers and successors. We will all be learning constantly; make this a place to share new knowledge.

THANK YOU to all who work so tirelessly to ensure that America's wild horses and burros live running free on our public lands. Working together, this vision will become reality.

Aug. 31, 2016

## BLM Wild Horse and Burro Program

The Bureau of Land Management manages more than 245 million acres of public land, the most of any federal agency. This land, known as the National System of Public Lands, is primarily located in 12 Western states, including Alaska. The BLM also administers 700 million acres of subsurface mineral estate throughout the nation. The BLM's mission is to manage and conserve the public lands for the use and enjoyment of present and future generations under our mandate of multiple use and sustained yield. In Fiscal Year 2015, the BLM generated \$4.1 billion in receipts from activities occurring on public lands.



The Bureau of Land Management manages and protects our nation's wild horses and burros on 26.9 million acres of public lands across ten western states.

The goal of the Wild Horse and Burro Program is to preserve healthy wild horses and burros on thriving public rangelands.

**<https://www.blm.gov/programs/wild-horse-and-burro>**

For detailed information on each Herd Management Area, please see: <https://www.blm.gov/programs/wild-horse-and-burro/herd-management/herd-management-areas>.

### Guide to Acronyms

**AML** - appropriate management level (herd population specific to each HMA, determined by BLM)

**BLM** - Bureau of Land Management

**EA** - environmental assessment

**EIS** - environmental impact statement

**FOAL** - Friends of a Legacy, Cody, Wyo.; advocacy group for McCullough Peaks mustangs

**FOM** - Friends of the Mustangs, Grand Junction, Colo.; advocacy group for Little Book Cliffs mustangs

**GEMS** - Great Escape Mustang Sanctuary, Deer Trail, Colo.

**HA** - herd area

**HMA** - herd management area

**JMHA** - Jicarilla Mustang Heritage Alliance

**MHF** - Mustang Heritage Foundation

**MOU** - memorandum of understanding

**NEPA** - National Environmental Policy Act

**NGO** - non-governmental organization (volunteer/ advocacy group)

**NMA/CO** - National Mustang Association, Colorado chapter

**PZP** - porcine zona pellucida; one-year fertility-control vaccine

**PZP-22** - porcine zona pellucida designed to work for 22 months - two gestational cycles

**SCC** - Science and Conservation Center, Billings, Mont.

**SOP** - standard operating procedures

**SWAT** - Sand Wash Advocate Team; advocacy group associated with GEMS and Sand Wash Basin mustangs

**TCF** - The Cloud Foundation

**TIP** - Trainer Incentive Program (Mustang Heritage Foundation)

**USFS** - U.S. Forest Service

**WHIMS** - Wild Horse Information Management System

**WH&BP** - BLM's Wild Horse and Burro Program

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# INTRODUCTION

## How do wild horses and burros inspire you?

**Ginger Kathrens, executive director, The Cloud Foundation** ~ March 1994. Dawn at the base of the Pryor Mountains in the red desert country.

My sister, Marian, was accompanying me on a driving trip from Colorado to Oregon and back – a location-scouting adventure to select places to film a half-hour television program about wild horses for Marty Stouffer's popular PBS documentary series "Wild America." We had heard about a newborn foal in the Pryor Mountain Wild Horse Range of southern Montana ... and foolishly thought we could find it. How hard could it be, we joked. It's only 40,000 acres!



The sun was barely peeking over the distant snow-covered Bighorns Mountains when we drove down the red road toward the entrance of the range. Movement caught my eye. A wild horse! I quietly got my camera set up and began filming a black horse as he ate snow at the base of a red butte.

As I filmed, my sister quickly grew bored. She began walking on the road, her white golf jacket glowing in the early light. The black horse lifted his head, tracking the white object moving nearby. He pranced proudly toward my sister, who stopped. So did the stallion. He stared and shook his head, revealing the large star under a luxurious forelock. Then he snorted and spun around, racing away. Joining him from the shadows of the butte was his family – three mares, a yearling son, and the tiny newborn foal! Trying to gamely keep up, the colt jumped over sage at the side of his

buckskin mother. It was an unforgettable moment.

The magnificent stallion's name was Raven. In an instant, without me even knowing it, my decades-long journey with Raven and his descendants had begun. I was hooked! I returned to Raven's Pryor Mountain home in June anxious and ready to see and learn more. As I ventured up the rough four-wheel-drive road, much to my surprise, I spotted horses paralleling my car. It was Raven! And that is how it went whenever I came to his spectacular and sacred mountain home – he and his family would appear. In time, they allowed me to trail along with them ... at a safe distance. I

took notes and filmed - always mindful of the importance of stillness and respect. In turn, these beautiful, wild creatures taught me about the complex family life of wild horse bands, and what they value above all else: family and freedom.

In the fall, the peace of Raven's spiritually powerful mountain home was shattered by a roundup. Many horses were killed, including two of Raven's three little sons. I was heartbroken, but determined that this would never happen again.

A year later, I was engrossed in filming a young stallion's indiscretion. He was trying to breed his father's newly won mare. My dear friend Anni Williams was with me when

we noticed something light-colored moving in the trees. I panned my camera, and out tottered a nearly white newborn foal with his mother, Phoenix, and the rest of Raven's band. The black stallion walked protectively behind them.

In an instant the pale palomino newborn stole my heart and propelled me on a journey of discovery that continues to this day. We named the colt Cloud.

The guidebook that follows, the brainchild of my friend and colleague Sandra Sell-Lee, is dedicated to those who dare to dream big. We believe this guide presents a humane way forward, whereby caring citizens can work together with nature to ensure a future in which every foal born may live its life in precious freedom ... as Cloud has.

# INTRODUCTION

## How do wild horses and burros inspire you?

### **Aleta Wolf, program director, Sand Wash Advocate Team**

~ I am a native of Colorado, and until 2010, I had no idea wild horses existed in our state, let alone at all. It was Ginger Kathrens' first Cloud documentary that spiked my interest to seek out these horses and see them for myself. I was on a mission to see a herd of wild horses. I saw many photographs on Facebook and finally contacted one of the photographers. She told me about the Sand Wash Basin herd in Colorado. It was Labor Day weekend in 2010 when I visited Sand Wash Basin, and that was the day my life changed forever.



Before that day I had never seen so many beautiful horses, and to watch them interact within their family bands was so very special. That day, I realized, the horses allowed me to enter their world and gave me

a glimpse of their life of family and freedom. That was when I began documenting the herd by their names and family structures. Other than for my own reference, what can I do with this information I've collected?

Well, in 2012, I met Michelle Sander, founder and owner of The Great Escape Mustang Sanctuary (GEMS).

This was the beginning of a long and productive relationship working to support the Sand Wash Basin herd. We created the Sand Wash Advocate Team (SWAT) as a special project under GEMS to provide on-range support for the herd. Then we began building what we have today, a solid working relationship with the BLM to provide on- and off-range support to the herd.

In closing, I realize the utmost necessity to these gorgeous creatures is their "family and freedom." In that they symbolize what our country was built on. They truly are our national treasures!

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### **Stella Trueblood, Sand Wash Advocate Team**

~ I made a couple of trips to Wyoming in search of wild horses before I found out we have our own special herds right here in Colorado! My first visit to a herd management area was Sand Wash Basin, in Northwest Colorado. At first glance, the land appeared to be very inhospitable, and I was amazed the wild horses survived the hot, dry summers and frigid, snowy winters, with no human intervention. That first day, I drove the dusty tracks until I saw horses, and they didn't look anything like I thought a wild horse should look. These horses were all colors; greys, blacks, pintos, grullas, palominos, chestnuts, sorrels. They were big and fat, and healthy. I was immediately in awe, and they have been part of my life ever since.



Back then, I knew very little about wild horses, their band structure, stallion behavior, bachelor bands or lead mares. I am

grateful the horses have allowed me into a small part of their lives. Some of my favorite times are just sitting and watching the horses as they go about their daily lives. These incredible creatures have changed mine, and I now dedicate myself to helping the horses stay wild, by volunteering with the Sand Wash Advocate Team and participating in the PZP program.

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**TJ Holmes, Disappointment Valley, Colo.** ~ In 2002, I entered into a love affair when I met a handsome grey stallion in Spring Creek Basin. That he had other ladies in his life made the allure only more intoxicating. Since then, mustangs have filled my life, which always has been full of horses. In addition to advocating for Spring Creek Basin's mustangs and others, I manage a 3,700-acre sanctuary in Disappointment Valley, adjacent to Spring Creek Basin. These mustangs are my family, and my life's journey is to ensure that they remain wild and free on their home range. I live in heaven, surrounded by the magic of mustangs. And I absolutely "wake up grateful every day" (words by Templeton Thompson).

# CHAPTER 1

## Get to Know Wild Horse and Burro Herds

**From Ginger Kathrens:** Understanding the typical behaviors of wild horses and burros is essential to successfully conducting a field-darting program using the safe and reversible contraception vaccine PZP (porcine zona pellucida). Wild horses are in many ways easier to spot and identify than burros because they organize themselves in family units called bands. These bands may have the same members for many years or some of the same members for years. Generally one dominant stallion tends and protects a mare or a group of mares throughout the entire year, unlike all other hooved animals in our hemisphere, including burros.

The wild horse stallion can often be identified by his tendency to put himself between any perceived danger and his mares and offspring (yearlings, foals). So if you are approaching a band, it is generally the stallion who will come out and stare. If he snorts, it is a signal to the band to flee. There is often a lead mare who will take the lead as they run away with the stallion protecting the rear.

In acclimating a wild horse band to your presence, you will need to “read” the stallion and stop approaching before he snorts and the band runs off. So how do you accomplish this? Here are some do’s and don’ts:

There may be an unusually marked/colored member of the wild horse family band. I call this a signature animal, a band member who reveals the identity of the band. Memorizing the signature animals is important in quickly identifying the family and whether it contains animals that are to be darted.

### DO:

- Move slowly and laterally rather than directly at them.
- Stay in the open where the horses can see you, at least 100 feet away.
- Sit down and be submissive.
- If a horse approaches, back away calmly until they lose interest.
- Become comfortable using binoculars and spotting scopes.
- Carry a walking stick that might resemble a dart gun
- Wear muted clothing.
- If the horses approach, take pictures of facial markings and leg markings. Note the side of the neck on which the mane falls. Record anything that sets each horse apart from another – conformational differences.
- Take note of all members of the band and their description, approximate ages/genders.
- Use standardized terms for colors and markings as outlined in Dr. Phillip Sponenberg’s *Equine Color Genetics* (third edition).
- Carry water, food, binoculars, scope and small tripod, the *Equine Color* book in your pack along with clothing appropriate for the season and weather forecast.
- Visualize success.

### DON’T:

- Do not stare at the horses. Pretend you are interested in something else.
- Avoid wearing clothes that are bright or white, rather wear greens, greys, blues and browns.
- If you are with someone, avoid speaking loudly – whisper.
- Avoid carrying a real gun as your attitude may inadvertently signal aggression.
- Do not attempt to touch or feed wild horses or burros.
- Do not hide.

Burros do not have the same social structure as wild horses. Male burros (jacks) often congregate in small groups or as solitary animals. They can be seen with females (jennies) but are not with the jennies on a day-in and day-out basis. Like other hooved wildlife species (elk, deer, bighorn sheep, mountain goats, bison and pronghorn), their primary role is breeding the females.

Burros are not as fast as horses and have evolved to size up a situation before moving away. Their first defense is not to run away immediately but they will move away if they believe you are a threat.

Reading a burro's attitude is important. If they continue to stare at you, stop, sit and act submissive by looking at the ground. With wild horses, they will sometimes be curious enough to approach you. Avoid sudden movements. If you have the opportunity for frequent visits, leave before they do. You will have made a positive start to habituating them to your presence.

In the Pryor Mountains of Montana, when I hid, the horses smelled/sensed something and decided that I was a predator. They ran away even though they could not see me. After that, I sat in the open, and I waved when they saw me just to let them know I was not trying to hide – what I call being “conspicuously benign.” The goal is to have them accept you as the new bush or tree in their environment. In short, you want them to ignore you. After 20 years of being benign and seeing many more people than they once did, the Pryor horses ignore respectful human activity. However, they are suspicious of people in the late winter and early spring because of the field-darting program. This is why you will want to always carry a walking stick – something that will look like a rifle. Let them get used to this even if you raise it.

Your ultimate goal is to be able to walk with them without them paying any attention. Ideally, you should try to work up to a dartable distance. If bait trapping is needed, the horses and burros can be darted with a small gun while they are in a trap that contains mineral blocks or grass hay, for instance. It is important that you are not associated with the food. People being associated with food is never a good thing for any wildlife species and should be forbidden in any PZP program. If adults or foals approach you, back away. We don't want to create petting zoos like the situation in Oatman, Ariz., with the burros. Your goal is to gain knowledge and appreciation of real, natural wild behavior. This is the single most enjoyable and rewarding part for me – to be accepted without being interactive or in any way altering their complex and fascinating society.

Dr. Phillip Sponenberg's *Equine Color Genetics* (third edition)

[https://www.amazon.com/Equine-Color-Genetics-Phillip-Sponenberg/dp/0813813646/ref=sr\\_1\\_fkmr1\\_1?s=books&ie=UTF8&qid=1471908013&sr=1-1-fkmr1&keywords=Dr.+Phillip+Sponenberg%E2%80%99s+Equine+Color+Genetics](https://www.amazon.com/Equine-Color-Genetics-Phillip-Sponenberg/dp/0813813646/ref=sr_1_fkmr1_1?s=books&ie=UTF8&qid=1471908013&sr=1-1-fkmr1&keywords=Dr.+Phillip+Sponenberg%E2%80%99s+Equine+Color+Genetics)

See also the BLM federal regulations regarding wild horses including subpart 4770.1, which outlines prohibited acts when it comes to harassing wild horses. [link]

# CHAPTER 2

## Getting Started - An Overview

<b>BLM WH&amp;B</b>	<b>HOW TO MANAGE WILD HORSES &amp; BURROS ON THE RANGE</b>	<b>WH&amp;B Advocates</b>
Can Initiate	SCOPING DOCUMENT	Can Make Proposals, Can Comment
Initiate	ENVIRONMENTAL ASSESSMENT	Can Make Proposals, Can Comment
	FORM NON-GOVERNMENTAL ORGANIZATION	Initiate and Manage
Co-create	OPTIONAL: MOU Memorandum of Understanding	Co-create
*BLM WH&B Field Manager Selects Job Descriptions	BUILDING YOUR TEAM	BLM Volunteers
*BLM Herd Manager	ESTABLISHING VISION AND LONG-TERM PLAN	*BLM Volunteers
*BLM Herd Manager	CREATE IMPLEMENTATION PLAN	*BLM Volunteers
*BLM Herd Manager	DESIGN CENSUS TRACKING SYSTEM	*BLM Volunteers *Database Administrator *Photographer *ID'er/Notes
*Certified Darters	PLAN, ADMINISTER AND TRACK FERTILITY MANAGEMENT SYSTEM	*Certified Darters *Support Bait Trapping
*Educational Literature *Publicity	COMMUNITY EDUCATION	*K-12 Schools *Publicity
*BLM Herd Manager	OPTIONAL: ADOPTIONS	*BLM Volunteers
*BLM Herd Manager	ECOSYSTEM TOURISM	*Community Advocates *Chambers of Commerce

# CHAPTER 3

## BLM Documents and Approvals

It is important to pay attention to timing.

### TIMELINE FOR GETTING STARTED:

- 0-30 days: Scoping period
- 30-60 days: Public comment period
- 60-90 days: Prepare environmental assessments
- 90-120 days: Public comment
- 120-150 days: BLM final approvals

**Optional:** Agree on formal memorandum of understanding with non-governmental organization (see below). Group may be a nonprofit advocacy group or coalition of groups. Advocates will work out what best suits their needs and partnership with their BLM manager(s). BLM may want a particular person to serve as the spokesperson for the group - or group of spokespeople who represent various groups in terms of coalitions of groups. (See **APPENDIX: SAMPLE**)

In order to best support natural reproduction cycles in the herd, the PZP fertility-control program needs to be administered when the vaccine is most effective:

1. Primer: may be given any time.
2. Boosters: between January and late April (optimal time of year to achieve effectiveness).

See **APPENDIX** for these sample documents:

- **SCOPING PERIOD:** Opportunity to raise concerns, ideas, and solutions to known issues in an EA or EIS (which is a much larger, longer, and in depth review). EAs in most cases are adequate for wild horse and burro planning, review, management options, recommendations.
- **PRELIMINARY ENVIRONMENTAL ASSESSMENT:** Provides a preliminary screening for NEPA (National Environmental Policy Act) applicability.
- **ENVIRONMENTAL ASSESSMENT:** Assessment to determine whether an environmental impact statement (EIS) is required.
- **NON-GOVERNMENTAL ORGANIZATION (NGO):** Establish group to work with BLM under a volunteer agreement or memorandum of understanding. Volunteer efforts to be coordinated by person in good standing with BLM herd manager and/or field office manager.
- **MEMORANDUM OF UNDERSTANDING (MOU):** Clarifies roles and responsibilities among public BLM field managers and private community advocates engaged in managing wild horse and burro herds on range.
- **VOLUNTEER AGREEMENT:** Advocates sign an agreement with BLM that enables them to partner with local BLM managers on range. This also provides BLM contact information in case of emergency.

# CHAPTER 4

## Build Your Team and Make Plans

### BUILD YOUR TEAM

From Dr. Jay Kirkpatrick, Science and Conservation Center: *Local personnel who are committed to solving the problem and who have some passion for getting the job done; this is perhaps the single most important ingredient in successful projects. BLM team members need to be open to working with volunteer experts, and advocates need to be willing to take direction from BLM staff.*

In northwestern Colorado, Sand Wash Basin wild horse advocates have been working collaboratively with the BLM for the last three years: <http://m.craigdaily.com/news/2016/sep/18/wild-horse-advocates-improve-range-everyone/?templates=mobile>

1. BLM designates BLM herd manager who has the responsibility to direct, approve and oversee all volunteer activities.
2. Herd manager works with other BLM staff and volunteer advocates.
  - \* Identify BLM field staff
  - \* Identify volunteer coordinator of advocates
  - \* Recruit and invite community advocates
  - \* Select volunteer job descriptions for “boots-on-the-ground” tasks as needed:  
(See **APPENDIX** for sample **VOLUNTEER JOB DESCRIPTIONS**)

**OPPORTUNITY:** Coordinate and manage all advocates to ensure a smooth working relationship exists among the advocates and the BLM field manager, such that the fertility control program will meet the highest standards of operation.

**OPPORTUNITY:** Maintain and track herd census

Long-range planner  
Photographer  
Herd observer/field documenter  
Database administrator

**OPPORTUNITY:** Maintain fertility-control schedule and darting plans

Bait-trapping assistant  
Fertility-control planner  
Certified darter  
Fertility-control database administrator

**OPPORTUNITY:** Monitor rangeland health

Land-restoration assistant  
Water-catchments assistant

**OPPORTUNITY:** Facilitate adoptions

WH&B trainer

**OPPORTUNITY:** Community education

WH&B educator

**OPPORTUNITY:** Ecosystem tourism

Ecosystem education promoter

**OPPORTUNITY:** Legislative education  
Legislative liaison

**OPPORTUNITY:** Department of Interior citizen scientist  
<https://www.doi.gov/blog/be-citizen-scientist-day>

Full team spends time together, getting to know one another, sharing experience and areas of expertise. Outcome: Team members decide roles and responsibilities – who is going to do what. Individuals will want to identify someone to back them up.

### **Selection criteria for volunteers and advocates** *(From Ginger Kathrens):*

- Advocates may be good at one thing and not another.
- It is best to be able to hike, but that's not essential if some ranges have areas with lots of roads.
  - ~ Experienced off-road drivers should be charged with actually driving. There may be a test required to work as a volunteer driver. This was required in the Pryors, even with our TCF UTV (utility terrain vehicle). The test is very simple, and you can study online.
- Some people are good with photography and can take pictures to create a booklet on all the horse bands and individual horses in the herd management area.
- Taking notes when field darting using PZP is essential.
  - ~ What horse in what band is being darted at what time?
  - ~ In which hip was the mare darted, and did the dart fall out?
  - ~ Was the dart recovered?
- Only the actual darter needs to be certified to field dart. (Learn about the Science and Conservation Center at [www.sccpzp.org](http://www.sccpzp.org) or email [sccpzp@hotmail.com](mailto:sccpzp@hotmail.com).)
- Advocates would only assist with bait trapping and would take their lead from someone with experience and people who are used to being in close proximity to wild horses. Not many people would qualify for that.
- The people who dart could be a small percentage of those who volunteer. I took the class but don't and probably won't dart.

### **MAKE PLANS**

3. Full team meets for planning (customize as needed).

#### **SAMPLE AGENDA:**

- Generate the vision description
- Set long-term goals (5 years)
  - example: herd size
  - example: range status
- Create an implementation plan (1 year)
- Agree on reporting processes to BLM and other oversight groups
- Discuss how to track and publish success stories
- Learn and practice safety-safety-safety
  - How to assist experts during bait trapping
  - How to assist experts during darting processes
  - How to assist rangeland monitoring personnel
- Discuss need for volunteers to have trained back-ups to assure continuity of key roles

# CHAPTER 5

## Design and Implement Key Census Processes

### 1. Identify local database administrator.

#### Selection criteria guidelines from John Cline:

- *The time to devote to building the records database, especially at the beginning.*
- *Knowledge of Visual Basic scripting to make modifications to forms and queries.*
- *Table and query management.*
- *Ability to create reports.*
- *Understands the functions of Windows Access 2010 and later.*
- *Understands the best practice for performing backup and restore.*
- *Be able to set folder and file access security.*

### 2. Select software database to maintain and track census and darting data.

#### Option 1: WHIMS: Wild Horse Information Management System

- PC base
- Track census data
- Track PZP scheduling and darting
- Owner's manual included (see **APPENDIX**)
- WHIMs Database modifications (see **APPENDIX**)

Contact: John Cline, volunteer WHIMS administrator  
email: john\_cline@usa.net

#### Option 2: HorseBase

- Track census data
- HorseBase is a Windows program specifically designed to keep track of wild horses. It was originally written for the Sand Wash Basin, Colorado, wild horse herd, but can be used for any herd. It is very easy to understand and use, yet has serious database search capability. The best way to describe the program is to study some screen images of the program at these Web addresses:

<http://www.sanesoftware.com/screenshot1.jpg>  
<http://www.sanesoftware.com/screenshot2.jpg>  
<http://www.sanesoftware.com/screenshot3.jpg>

One thing not shown on those screenshots is that the pictures are displayed at a larger size when you click any of the eight picture buttons or if you double-click any of the three pictures shown.

Horse data can be viewed or sorted in many ways such as by band, color, gender, age, blaze, etc., using the full power of a modern database program. You have the ability to filter records based on just about any criteria you can think of. This is made easier by drop-down list boxes for some of the common fields you might want to specify in a record filter. Many sample filters are included that can be used as-is or modified.

The HorseBase data is stored in a Microsoft Access database, so anyone with that software or other software that can open an Access database (like Excel) can use it to create custom reports or forms. Microsoft Access is NOT required in order to use HorseBase; this is just an additional option for those who want to do so. Everything needed to run and fully use HorseBase is included when you download and install the software.

This software sells for \$50 and is available only via online download. It runs on all Windows computers running Windows XP, Windows 7, 8.1, or 10. It also runs on Windows tablets (like the Microsoft Surface or Asus, Dell, or Lenovo tablets) running Windows 8.1 and 10. It does not run on any Apple computers.

Contact: Mike Paulick, volunteer HorseBase administrator  
email: [mike@sanesoftware.com](mailto:mike@sanesoftware.com)

### **Note from Mike:**

*I am willing to modify HorseBase to include darting data, but no one has yet expressed a desire for this modification so I have not done so. The darting data for the SWB herd is maintained on paper and using Excel spreadsheets. When we dart, we carry a small laptop computer running HorseBase, and it is invaluable to help identify horses in the field.*

*My wife, Christine Beaumont, is an expert at identifying the SWB horses but still relies heavily on HorseBase. We have been distributing HorseBase mostly with current information and pictures of the SWB herd. However, we also distribute it with an empty database for use with other herds.*

*I am a retired professional software developer. Being retired, I'm not interested in working on marketing this software to increase sales, but I like to see others using it. Sales have been strictly from word-of-mouth.*

### **3. Photograph individual herd members**

Photography is an art, not a science. Advocates will need to learn how to be present with a herd and with individual wild horses and burros, such that the photographer becomes part of the scenery. See "Chapter 1: Get to Know Wild Horse & Burro Herds," where Ginger Kathrens describes guidelines for photography.

### **4. Name each individual**

#### **Naming protocols from Ginger Kathrens:**

*The foals can be done as in the Pryors – first year would be the A's, second year the B's, etc. The band can be named based on a color or a behavior, and it is good for memorizing if the names in a band have a theme, perhaps. The signature animal is important, and hopefully, most bands will have one member that is a little different. Four socks, for instance, or a strange/unusual face marking.*

### **5. Track and maintain census data**

- Births, parents, siblings, deaths
- Sort by families, band members

### **6. Geotagging**

#### **Notes from Ginger Kathrens:**

*Geotagging, using GPS to record locations of bands in the HMAs could prove invaluable for relocating wild horse bands and for showing the range of the bands. You could actually create a map of band use areas at specific times of year or times of the day. Free apps for this are available for all cell phones. Google Earth is very difficult to read the latitude and longitude so an alternative might be the Theodolite Application, which is free and has much larger type.*

*For photographers, some camera bodies have a GPS latitude and longitude port into which you can plug a GPS unit (Geotagging GPS receiver) and it can sit in the shoe on top of the camera. Each picture will have the latitude and longitude as part of the metadata – exactly where each picture was taken (latitude and longitude) is recorded as part of the metadata. Costs for the Nikon like I use (Nikon D7100) is \$35 from Opteka. If purchased through Amazon Smile, a portion of the proceeds could go to the On range Management Fund to help pay expenses for field advocates.*

*A long lens will be needed (i.e. 300mm) for getting pictures of the horses because most wild horses are approachable only to within a hundred feet or so without spooking. Of course, this is highly variable based on the experiences of the wild horses to humans. (See Chapter 1: Get to Know Wild Horse and Burro Herds)*

*Geotagging could also be very useful for recording the location of water sources and natural mineral licks used by the mustangs.*

## **7. Use of drones to locate wild horses (do not fly within 100 feet of any wild animal)**

**Information about drones from the Drone Authority:** <https://thedroneauthority.org/drone-licence/>

**Effective Aug. 29, 2016, all commercial small Unmanned Aircraft Systems (Drone) operators are required by law to be licensed with the FAA.**

### **Commercial drone license:**

If you plan to operate your drone for commercial reasons (for Business or Work), you must carry a Remote Pilot License issued by the Federal Aviation Administration (FAA). In order to obtain a Remote Pilot license, you must complete an Aeronautical Knowledge test at an FAA certified testing center, prior to applying for your certification.

### **Operating rules:**

- ~ Class G airspace\*
- ~ Must keep the aircraft in sight (visual line-of-sight)\*
- ~ Must fly under 400 feet\*
- ~ Must fly during the day\*
- ~ Must fly at or below 100 mph\*
- ~ Must yield right of way to manned aircraft\*
- ~ Must NOT fly over people\*
- ~ Must NOT fly from a moving vehicle\*

\* All of these rules are subject to waiver.

### **Remote pilot requirements:**

- ~ Must be at least 16 years old
- ~ Must pass an initial aeronautical knowledge test at an FAA-approved knowledge testing center.
- ~ Must be vetted by the Transportation Safety Administration (TSA)

Please note: A person who already holds a pilot certificate issued under 14 CFR part 61 and has successfully completed a flight review within the previous 24 months can complete a part 107 online training course at [www.faasafety.gov](http://www.faasafety.gov) to satisfy this requirement.

## **Information about drones from BLM (<http://www.nifc.gov/drones/>):**

“The recreational use of drones on BLM land is prohibited in designated wilderness areas and where they could interfere with public safety, like during wildland fire fighting and law enforcement operations. As of right now, recreational drone use is allowed in other areas but we would ask the drone pilots to be mindful of those around them and not infringe on the nature experience of others out hiking, camping, or otherwise enjoying their public lands or to cause stress to any wildlife. If members of the public have any questions about specific land areas, they are always welcome and encouraged to contact their local BLM Field Office.”

## **Excerpts from BLM’s unmanned aerial system (UAS) communications plan:**

### **What is recreational use of UAS?**

The recreational use of UAS is the operation of an unmanned aircraft for personal interests and enjoyment. For example, using a UAS to take photographs for your own personal use would be considered recreational; using the same device to take photographs or videos for compensation or sale to another individual would be considered a commercial operation. You should check with the FAA for further determination as to what constitutes commercial or other non-hobby, non-recreational UAS operations.

### **What is a TFR?**

Temporary flight restrictions, or TFRs, define special restrictions for the airspace during special events or hazardous situations. When a TFR is in place, there should be no air traffic – manned or unmanned – except for those supporting the operations. But TFRs do not just apply to wildfires. For stadium events ranging from concerts to NASCAR races to the Super Bowl, model aircraft flights and unmanned aircraft operations are generally restricted.

They often are put in place with short notice, so before taking your model aircraft or UAS out for a flight, it is important to check with the FAA to ensure that there are no TFRs in your area.

### **Using UAS for BLM Operations**

The BLM administers over 245 million surface acres of public land across the U.S. This includes vast expanses of remote landscapes with little or no road access. Unmanned aircraft systems (UAS) allows the BLM to obtain imagery and data with greater safety, significant cost savings and minimal disturbance to native species and visitors.

Safety is the BLM’s foremost concern when flying UAS missions. Every mission is coordinated with the Department of Interior’s (DOI) Office of Aviation Services (OAS), BLM Fire and Aviation, appropriate management and resource staff, local governments and the community.

We are committed to building positive relationships with the communities adjacent to BLM lands, and part of that effort involves transparency. On occasion, we invite stakeholders and the news media to observe UAS data collection missions.

BLM Fire and Aviation is the lead organization for UAS operations in the BLM. OAS is the lead agency at the department level and manages the actual fleet of UAS. The BLM’s National Operations Center leads the project level work, including the science and technology aspects and managing collected data.

The BLM has decades of proven experience in the collection, use, control and retention of aerially collected data. The BLM employs the same storage and security policies for the data collected by unmanned aircraft flights as it does for manned aircraft supported missions.

The use of UAS allows the organization to utilize a cost-effective data acquisition platform that provides highly accurate and detailed data relevant to everyday business needs.

## 8. Trail cameras

### **From Ginger Kathrens:**

*There is no doubt that strategically placed trail cameras can reveal the habits and identity of wild horses in the daytime or at night. High quality, 720p resolution live-action shots or still images can show markings on individual animals as the horses move past the cameras. Cameras placed near water sources or along well-used trails where horses pass by going to and from water are likely to produce excellent results. Cameras in well-used draws have been highly successful in some herd management areas in Colorado. HD high-quality 720p resolution.*

*Picture files from the camera cards can be easily downloaded into a computer program, sorted and identified, putting the data into whatever horse-identification software program being used, or can be downloaded into a simple Excel spreadsheet. Trail cameras are durable and relatively inexpensive at around \$125.*

# CHAPTER 6

## Design and Implement Fertility-Control Program

### **GOAL: HERD SIZE = REPRODUCTION and MORTALITY EQUAL OUT OVER TIME**

Introduction: general advice from Dr. Jay Kirkpatrick, Science and Conservation Center (<http://www.sccpzp.org/>), Oct. 2, 2015:

*In every case, there is someone who knows all the horses and keeps the records.*

#### **Non-scientific dimensions of wild horse fertility control:**

*There are a number of non-scientific issues at the heart of whether or not a project will be successful. Only history and the attendant lessons can tell us the nature of these issues. Assateague Island National Seashore has clearly been the single most successful wild horse fertility-control project ever conducted. Over 28 years, the following points were identified as being central to this success:*

- *The science worked.*
- *Long-term commitment by administration.*
- *No change in direction with each new administration.*
- *Sound management plan.*
- *Appropriate allocation of resources to get the job done.*
- *Well-trained and dedicated field personnel.*
- *No turnover in field personnel.*
- *Proactive public education program.*

*An independent analysis of other projects, with diverse species across three continents, suggests the following characteristics of successful projects:*

- *A legitimate problem with public or organizational recognition of the problem.*
- *A problem that is logistically soluble (some are not).*
- *Local personnel who are committed to solving the problem and who have some passion for getting the job done; this is perhaps the single most important ingredient in successful projects.*
- *Proper and thorough training of field personnel in all aspects of project (technical, safety, educational).*
- *Political and agency cooperation.*
- *Adequate resources to conduct the project.*
- *A well-planned and executed educational/PR program to “bring the public along.”*
- *A reliable and systematic retrieval of appropriate data.*
- *Appropriate dissemination of results in both the popular and scientific media.*

#### **KEY STEPS TO A SUCCESSFUL WILD HORSE FERTILITY-CONTROL PROGRAM:**

**A. BUILD RELATIONSHIPS** with BLM range specialist/wild horse specialist/manager(s). (See also Chapter 4: Build your team and make your plans.)

**VOLUNTEER EXPERIENCE** from volunteer TJ Holmes: *Developing a good working relationship with the herd manager/wild horse and burro specialist is critical. If they don't know you, they won't allow you to go out and start darting horses. Here, it took years and staff turnover to a) establish that I was here to stay ... and b) get staff members who would trust working with a volunteer.*

**B. PLAN CERTIFICATION TRAINING** at the Science and Conservation Center in Billings, Mont., with BLM

support to implement a fertility-control program with advocates and BLM staff.  
(Please contact SCC for enrollment forms and a schedule of classes: [sccpzp@hotmail.com](mailto:sccpzp@hotmail.com))

It is not necessary that advocates and BLM attend the same class.

**C. DESIGN THE FERTILITY-CONTROL PROGRAM** with BLM and advocates to plan what will work best for particular circumstances. More information is being gathered about PZP-22.

Local situations will differ in how the planning occurs:

- BLM invites input from experienced advocates;
- BLM plans the schedule, and experienced advocates provide labor.

Please contact BLM and SCC for more information on the latest developments in PZP, PZP-22 and Gonacon.

[http://www.blm.gov/style/medialib/blm/wo/Information\\_Resources\\_Management/policy/im\\_attachments/2009.Par.56797.File.dat/IM2009-090\\_att1.pdf](http://www.blm.gov/style/medialib/blm/wo/Information_Resources_Management/policy/im_attachments/2009.Par.56797.File.dat/IM2009-090_att1.pdf)

**a. TIMING IS IMPORTANT**

In order to best support natural reproduction cycles in the herd, the PZP fertility-control program needs to be administered when the vaccine is most effective. However, this may vary because of access issues, etc.

1. Primer: may be given any time
2. Boosters: between January and late April.
3. Note: PZP-22 is designed/meant to be longer lasting – 22 months, hence the name.

**b. DESIGN PROCESS FOR BAIT TRAPPING**, if/when/where needed.

Advocates only assist with bait trapping, taking their lead from someone (BLM staff or BLM-hired contractor(s)) with experience and people who are used to being in close proximity to wild horses. Not many people will qualify for this task. (See **APPENDIX** for BLM SOP, sample bait-trapping proposal and sample bait-trapping report.)

**c. IDENTIFY WHICH MARES GET DARTED** – by age, by number of offspring already existing, etc. Advocates and/or BLM may know reliable locations of particular mares; this may be very important depending on the size of the herd management area.

**d. Non government organization (NGO) of advocates works with BLM within**

**e. Constricts of an agreement. If no NGO exists, each individual advocate must execute a VOLUNTEER AGREEMENT with the BLM.** (See **APPENDIX** for sample MOU.)

**VOLUNTEER EXPERIENCE** from Ginger Kathrens in the Pryors 5/27/16:

*We were a team of three present when we darted in the Pryors in 2013. Lauryn Wachs was the driver of the UTV, I was a photographer-record keeper, and Effie Orser was the darter. Lauryn and I also served as not-so-great decoys for the wary mares. We would go where the mare could see us and do goofy things like dance around while Effie discretely walked in closer and made her shot. Never worked with a wonderful mare named Topper in the Pryors. She was a sly one – Carol Walker’s favorite mare on the mountain. Jay was the only one we knew of who ever successfully darted her. He got a kick out of that.*

This chapter and materials provided by:

- Dr. Jay Kirkpatrick (October 2015), Science and Conservation Center, Billings, Mont.;
- Kimberly Frank, chief operating officer, Science and Conservation Center;
- Ginger Kathrens, volunteer, The Cloud Foundation, Pryor Mountain Wild Horse Range;
- TJ Holmes, volunteer darter and documenter, Spring Creek Basin Herd Management Area;
- Jared Bybee, BLM-WDC, WH&B Detail, senior natural resource specialist

# CHAPTER 7

## Prepare for Adoptions

### INTRODUCTION

- When necessary and appropriate, select individual horses for adoption after gathers and removals.
- Prepare individuals for adoption at local facility.
- Volunteer professionals conduct halter training, trailering, hoof care.
- Oversee adoptions and track followup monitoring under BLM agreement/supervision.

### **EXAMPLE: BLM OR-WA: Beatys Butte Wild Horse Gather, Fertility Control, and Training Assistance Program, Lakeview District, Ore.:**

**OBJECTIVES:** The objective of this program is to successfully capture, treat with PZP (for fertility control), train, and adopt out excess wild horses from the BLM Beatys Butte Herd Management Area in order to maintain the herd management area (HMA) at the optimal appropriate management level (AML).

**PUBLIC BENEFIT:** By maintaining the wild horse populations within their AML, a thriving natural ecological balance is maintained, improving maintenance of rangeland resources for multiple uses by the public. BLM financial assistance will help increase the number of adopted horses, reduce the number of horses in the HMA, reduce or remove the need for future large gathers, and ultimately reduce the overall cost to the public of managing the Beatys Butte HMA.

<http://www.federalgrants.com/BLM-OR-WA-Beaty-Butte-Wild-Horse-Gather-Fertility-Control-and-Training-Assistance-Program-Lakeview-District-OR-55315.html%0A>

SECOND LINK to come on BLM's website: "Statement of Programmatic Involvement"

# CHAPTER 8

## Community Education

### NEWSPAPER PUBLICITY

1. Coordinate all publicity with BLM Public Affairs staff to ensure maximum exposure.
2. Write articles for your local news outlets, telling the story of your wild horse herd.
3. Contact local TV stations and invite them to film the wild horses and what you are doing.
4. Be sure to tell people how your team of wild horse advocates works with local BLM managers.
5. Emphasize that this is the future of managing wild horses in order to eliminate the need for gathers and holding pens.
6. Keep current on the status of the larger population of wild horses.
7. Promote adoptions of those in short-term holding.

### YOUTH ENGAGEMENT

- Promote your local herd in schools. Ask teachers to support projects where students can earn school project credits by helping advocates with “boots-on-the-ground” tasks.
- Introduce young people to the DOI’s Citizen Scientist program.

**Example:** <https://www.abqjournal.com/880813/going-with-the-flow.html>

### **A volunteer’s experience at her local farmers market by Linda Hanick, director of social media at the Cloud Foundation:**

*I found out who was the manager of the market from one of the vendors I knew. Then I approached the manager and asked her if she had considered having a not-for-profit booth there and if there would be a charge. (I wasn’t going to pay anything, but I just wanted to be in good faith.) I told her that whatever I sold was given back to the Cloud Foundation to support its work for the protection of the wild horses.*

*She said that she would love having me there – it would be a nice diversity to the group of vendors. I always find a good space between a couple of busy booths where I set up my table, banner and materials. I give a bookmark to all children and ask attendees who show an interest if they know we have five wild horse herds here in Colorado. I have a letter for them to sign that I send to our senators and representative, lots of information, contact websites and email addresses. Some want to see horses, so I give directions to our herds here in Colorado and in nearby Wyoming. I’ve even had folks come back to the market the next week to tell me about their amazing trip to see the Sand Wash Basin horses or the Little Book Cliffs horses.*

*I have done this every Thursday since June 2010, have talked to hundreds of people and am very encouraged. EVERYONE knows that the wild horses are being rounded up, but they don’t know why or anything about the particulars of the BLM. Since then, I have talked to only two people who are on the “other side,” but I was respectful, and so were they.*

*This has been a great opportunity to meet folks in my community and a great way to educate and stimulate interest in our wild horses. I even have gotten calls at home one week when I couldn’t go to the market and I was missed. They just want more information. Now is the time to plan, so put your plans in action.*

# CHAPTER 9

## Ecosystem Management for Tourism

### Wild horses and burros boost local businesses

From The Cloud Foundation's 2017 calendar:

The presence of large, charismatic wild animals on western landscapes harkens back to a time long ago when humans had not yet dominated and, in many cases, eliminated wild places. Few animals are as charismatic as our native wild horses or as tough as their little burro cousins. Yet they have often been treated as second-class citizens on the few areas designated for their use in 10 western states.

Because wild horses and burros compete with privately owned livestock and oil and gas on our public lands, they are marginalized. Because they are protected by an act of Congress and cannot be hunted, they are often treated as valueless. Nothing could be further from the truth. Take Lovell, Wyo., for instance, a community of fewer than 3,000 people near the Montana border. The presence of the wild horses in nearby Pryor Mountain Wild Horse Range is one of the biggest tourism draws for this small town. An even smaller town is Maybell, Colo., with fewer than 100 people, near Sand Wash Basin Herd Management Area in the northwestern corner of Colorado. Here, too, the largest financial contributor to local businesses is the influx of wild horse enthusiasts – larger than the economic benefits of hunting, we are told.

When you visit wild horse and burro areas and stay at local motels, eat at local restaurants and buy gas at local filling stations, make sure you let the proprietors know you have come to see wild horses and burros. And when you do visit the wild horse or burro range, tread lightly, leave no trace that you were there and remain at a respectful distance from the horses and/or burros. This is their home. You are just a lucky guest. Take a deep breath. And let their strength inspire you to fight for their right to remain forever free!

#### EXAMPLES:

#### THE PRYOR MOUNTAIN WILD MUSTANG CENTER – tour model

~ <http://www.pryormustangs.org/>

#### Mission statement

The Pryor Mountain Wild Mustang Center is dedicated to preserving and interpreting the Pryor Mountain mustangs, their evolution, history, habitat needs and historical significance.

#### Vision statement

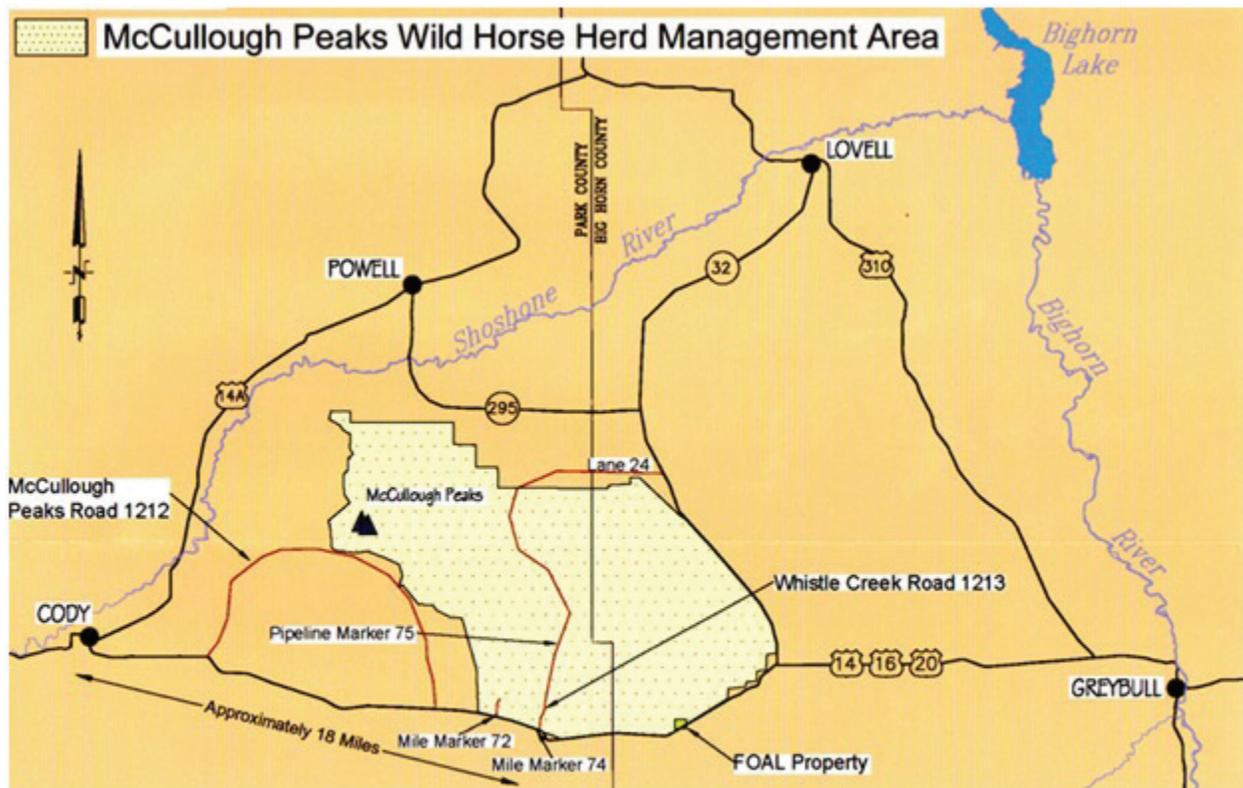
The Pryor Mountain Wild Mustang Center is a public, not-for-profit 501c3 educational institution whose purpose is to:

- Inform visitors of the historic significance of the local mustang herd and of the other wild horses across the West.
- Provide visitors with an unforgettable aesthetic experience, viewing live mustangs in a magnificent setting.
- Enable visitors to learn about the dynamics of a mustang herd, the social interactions within individual bands, and the mustang's place alongside other wild species.
- Preserve and promote a genetically viable herd of Colonial Spanish American horses in the Pryor Mountains.

**FRIENDS OF A LEGACY, McCULLOUGH PEAKS HERD MANAGEMENT AREA** advocacy group

~ <http://friendsofalegacy.org/>

In addition to the work by FOAL members to help BLM manage the wild horses in McCullough Peaks Herd Management Area, they have established a basis for promoting ecotourism. Future plans include building an interpretive center, which will provide education for visitors about all aspects of this preserved ecosystem while they drive through. More information and contacts can be found on their website.



**The McCullough Peaks - Wild and Beautiful**

Consult this map for your visit to the 109,000 acres of the McCullough Peaks Wild Horse Herd Management Area (HMA). Enjoy the remarkable panoramic view of the badlands featuring rugged mountains, canyons, washes, and dusty meadows that vary in spectacular color with the ever changing light of day. It's a geological wonderland! You may see wild horses, pronghorn antelope, jack rabbits, sage grouse, eagles, coyotes, and other wildlife. Crow hunting parties, covered wagons on the Bridger Trail, and the mustangs are part of the legendary history of this territory.

# CHAPTER 10

## Conclusions

### **VISION:**

All wild horses and burros in the United States run free on public rangelands. Herd populations are managed by the joint efforts of WH&B advocates and BLM field staff such that reproduction and mortality rates balance. Very few mustangs are available for adoptions. Community members have come together, accepting a shared responsibility for maintaining herds that are healthy and genetically viable. Families visit and view from a distance one of America's most iconic treasures. Schoolchildren learn how to preserve and protect America's wondrous ecosystem. Like the American eagle and bison, wild horses and burros have been elevated to a shared status representing freedom for all.

### **CURRENT SITUATION:**

The vision is clear; the path forward is known and do-able. Much work needs to be done to publicize and make normal the few examples that exist where this vision has become reality. There are approximately 170 wild horse herds that are waiting for people in their local communities to join with the BLM to ensure their futures as the free-roaming beings they are meant to be. The need is immense, and volunteer resources are ready to step up.

### **NEXT STEPS:**

Advocates and BLM field managers and WH&B specialists assume responsibility at each herd site to engage with one another, get educated, get enabled with know-how, and become empowered to take on this challenge. Each herd site is unique, and exactly how the vision plays out in the local community will be appropriate to their situation. The goal? For each local group to become self-managing, sharing the responsibility for wild horses and burros remaining free – forever.

### **STEPS ALONG THE WAY:**

- All horses and burros in long-term holding pastures live out their natural lives. Contracts for their care have sunset clauses pegged to the youngest animal in their care.
- All wild horses and burros in short-term holding pens will have either been adopted or lived out their natural life in captivity. A 10-year plan to reduce short-term holding to zero will gradually reduce the population. Natural mortality, adoptions, moving to long-term holding, moving to reconstituted HMAs, and stopping gathers will achieve this goal.
- People in the communities, volunteer advocates and all levels of the BLM shift their focus, energy and resources toward enabling on-the-range management on range management and off range adoptions.

**See MATRIX:** Herds and contacts

+ link to TCF

**See MATRIX:** PZP status of 177 herds – IN DEVELOPMENT

+ link to TCF

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### CHAPTER 3: BLM Documents & Approvals

#### **SAMPLE SCOPING DOCUMENT:**

##### **Spring Creek Basin Herd Management Area scoping document for bait trapping:**

- <http://www.thecloudfoundation.org/images/pdf/FieldGuideDocuments/SpringCreekScoping-Documents2015.pdf>

#### **SAMPLE ENVIRONMENTAL ASSESSMENTS:**

##### **Sand Wash Basin Herd Management Area population control:**

- <https://eplanning.blm.gov/epl-front-office/eplanning/projectSummary.do?methodName=renderDefaultProjectSummary&projectId=59798>

##### **PZP Fertility-Control Management Pilot for Wild Female Burros:**

- <http://www.thecloudfoundation.org/images/pdf/Chapter3SamplePZPPublicNotice.pdf>
- [http://www.blm.gov/az/st/en/info/newsroom/2016/july/blm\\_seeking\\_public.html](http://www.blm.gov/az/st/en/info/newsroom/2016/july/blm_seeking_public.html)
- [https://eplanning.blm.gov/epl-front-office/projects/nepa/63704/76476/84934/ZonaStat-H\\_PZP\\_Fertility\\_Mgmt\\_Pilot\\_Project\\_for\\_Wild\\_Female\\_Burros\\_EA\\_-\\_July\\_2016.pdf](https://eplanning.blm.gov/epl-front-office/projects/nepa/63704/76476/84934/ZonaStat-H_PZP_Fertility_Mgmt_Pilot_Project_for_Wild_Female_Burros_EA_-_July_2016.pdf)

#### **SAMPLE MEMORANDUM OF UNDERSTANDING** between the Bureau of Land Management and Friends of the Mustangs (Grand Junction, Colo.):

- [http://www.friendsofthemustangs.org/uploads/1/2/1/2/12124433/fom\\_mou\\_2016.pdf](http://www.friendsofthemustangs.org/uploads/1/2/1/2/12124433/fom_mou_2016.pdf)

#### **SAMPLE VOLUNTEER AGREEMENTS** available on The Cloud Foundation's website:

### CHAPTER 4: Build Your Team - Make Plans

Volunteer job descriptions (16)

Note from experienced volunteer: *Something to note is that, especially in smaller herd management areas, one person is going to wear a lot of these hats. Sometimes, too many people doing too many little things just makes everything difficult to coordinate.*

**OPPORTUNITY:** Maintain and track herd census

#### **Volunteer coordinator of advocates**

Description: In cooperation with the BLM field manager, manage and provide oversight to the work of the herd advocates; support the selection, training and coaching to ensure all tasks are carried out accurately and reliably. Succession planning: Maintain a pipeline of trained volunteer interns to ensure smooth transitions when advocates leave the field work and someone else must step in.

#### **Long-range planner**

Description: Advocates assist wild horse and burro or rangeland management specialists in the long-term assessment of rangeland health in order to best determine and plan for appropriate management levels to ensure ongoing herd genetic viability.

#### **Photographer**

Description: Advocates assist BLM specialists in the photography of individual herd members, assigning names and noting significant markings.

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### **Herd observer/field documenter**

Description: Advocates assist photographer in the documentation of individual herd members, noting names, markings, areas where sighted, dates and times, and with whom they were traveling. Notes are also maintained on births and deaths.

### **Database administrator**

Description: Advocates assist photographer and herd observer/field documenter in maintaining a software database system in order ensure that accurate, reliable and current herd census data is maintained.

**OPPORTUNITY:** Maintain fertility-control schedule and darting plans

### **Bait-trapping assistant**

Description: Advocates assist BLM WH&B specialists in the planning and construction of WH&B bait traps on range.

### **Fertility-control planner**

Description: Certified advocates provide expertise to assist in the development and monitoring of a fertility-control program to ensure herd populations meet a goal of reproduction under Fertility Control Planner and mortality rates equalizing over time.

### **Certified darter**

Description: Certified advocates provide expertise to assist in the application of field darts in the field to wild horse mares and wild burro jennies, as described in fertility-control plan and schedule.

### **Fertility-control database administrator**

Description: Advocates assist fertility-control planner and certified darters in the maintenance of a software database system in order ensure accurate, reliable and current herd census data is maintained.

**OPPORTUNITY:** Monitor rangeland health

### **Land -restoration assistant**

Description: Advocates assist BLM rangeland management specialists in the implementation of restoration projects, including documentation of rangeland quality.

### **Water-catchments assistant**

Description: Advocates assist BLM rangeland management specialists in the implementation of water-catchment projects.

**OPPORTUNITY:** Facilitate adoptions

### **WH&B trainer**

Description: Experienced advocates start wild horses and burros in learning to live with human beings in a domestic setting. Essential elements include halter-training, hoof care and trailering. (what about re-wording this to say: Experienced advocates start wild horses and burros on learning to accept human beings in a domestic setting.

**OPPORTUNITY:** Community education

### **WH&B educator**

Description: Advocates assist in public education to support ongoing stewardship of all wild horses and burros on range; may include the preparation of your age-appropriate curriculum for local schools,

## APPENDIX

4-H clubs, country fairs and equine events large and small.

**OPPORTUNITY:** Ecosystem tourism

### **Ecosystem education promoter**

Description: Advocates coordinate with BLM WH&B specialists, rangeland management specialists, other appropriate biologists and local chambers of commerce in the planning, implementation and promotion of a community ecosystem demonstration project for purposes of promoting local tourism.

**OPPORTUNITY:** Legislative education

### **Legislative liaison**

Description: Advocates promote local needs regarding effective management of wild horses and burros on the public lands to their U.S. senators and U.S. representatives such that the best interests of the wild horses and burros remain central to our nation's ongoing planning for preservation of nature and wildlife.

**OPPORTUNITY:** DOI citizen scientist

<https://www.doi.gov/blog/be-citizen-scientist-day>

## CHAPTER 5: DESIGN & IMPLEMENT KEY CENSUS PROCESSES

### **WHIMS owners manual:**

[http://www.thecloudfoundation.org/images/pdf/WHIMS\\_Version\\_2.1\\_Manual.pdf](http://www.thecloudfoundation.org/images/pdf/WHIMS_Version_2.1_Manual.pdf)

### **WHIMS database modifications:**

<http://www.thecloudfoundation.org/images/pdf/Chapter5WHIMSDatabaseMod.pdf>

## CHAPTER 6: DESIGN & IMPLEMENT FERTILITY-CONTROL PROGRAM

### **BLM SOP for FERTILITY CONTROL**

[http://www.blm.gov/style/medialib/blm/wo/Information\\_Resources\\_Management/policy/im\\_attachments/2009.Par.56797.File.dat/IM2009-090\\_att1.pdf](http://www.blm.gov/style/medialib/blm/wo/Information_Resources_Management/policy/im_attachments/2009.Par.56797.File.dat/IM2009-090_att1.pdf)

### **BLM SOP for BAIT TRAPPING**

[http://www.thecloudfoundation.org/images/pdf/Chapter6BLMSOP\\_bait-trappingproposal-2.pdf](http://www.thecloudfoundation.org/images/pdf/Chapter6BLMSOP_bait-trappingproposal-2.pdf)

### **SAMPLE: BAIT-TRAPPING PROPOSAL**

<http://www.thecloudfoundation.org/images/pdf/Chapter6SampleBAIT050814BTSCB.pdf>

### **SAMPLE: BAIT-TRAPPING REPORT**

<http://www.thecloudfoundation.org/images/pdf/Chapter6LBCbaittrappingreport.pdf>

### **Q&A between TCF and Dr. John Turner (Universtiy of Toledo)about PZP-22:**

#### **1. For planning purposes, I am using \$230/dose; is that a reasonable amount to use?**

The current cost of the complete PZP-22 vaccine is \$240 for the controlled-release component and \$30 for the primer. Total is \$270 per mare. It is required that any PZP vaccine, including Zonastat H, must be delivered by state-certified pesticide applicators or individuals under their direct supervision.

## APPENDIX

### **2. When you apply PZP-22, what is the current state-of-the-art for application? Is it dart-able?**

It can be delivered via hand/jabstick or via dart (good success with both approaches). Note that the Pseudart for PZP-22 use has been modified to contain an internal metal rod that pushes the pellets out of the needle along with the liquid emulsion upon impact. The pellets are coated lightly with petroleum jelly and inserted into the tip of the needle barrel after the primer emulsion is loaded into the dart. The SCC does not train people for pellet use. They have been trained in BLM workshops. The procedure is fairly simple. I can provide a video of the PZP-22 prep if desired so that you can view it and then describe it however you wish for your document.

### **3. Timing: What, if any, constraints do you have to observe to ensure the vaccine is most effective? Can the mares be treated at any time of year, or are there seasonal windows-of-opportunity that must be observed?**

Efficacy is greatest when vaccine is delivered between December and February. Efficacy decreases as you go back toward September, with both year 1 and year 2 fertility rates increasing significantly. We do not recommend treatment prior to December. In the case of retreatment after two to three years, treatment can be given October through February and will limit fertility to approximate average rate of about 17 percent across at least three consecutive years.

### **4. Frequency: What is your experience with the frequency of applications of PZP-22? Is there a point at which mares will become permanently infertile?**

NO data for this, but based on the Assateague data using two-injection protocol with annual boosters, most mares return to fertility even after five to six consecutive years of treatment.

### **5. Protocols/certification: what standard operating procedures exist for use of PZP-22? (Here is a link to the BLM SOP: [http://www.blm.gov/style/medialib/blm/wo/Information\\_Resources\\_Management/policy/im\\_attachments/2009.Par.56797.File.dat/IM2009-090\\_att1.pdf](http://www.blm.gov/style/medialib/blm/wo/Information_Resources_Management/policy/im_attachments/2009.Par.56797.File.dat/IM2009-090_att1.pdf))**

This BLM SOP was originally prepared by Jay and me, and was modified across years at SCC. This protocol is applicable to the PZP-22 for darting use with the addition of insertion of controlled-release pellets into the dart needle after followed by needle tip closure with petroleum jelly.

### **6. Special education or training needs beyond PZP? If one is certified to dart PZP, are they competent to dart with PZP-22?**

The pellets are safe and stable, so the only addition is how to load them into the dart needle's barrel and seal it as noted above.

## **Q&A with Stella Trueblood, principal darter (native PZP and PZP-22) in Sand Wash Basin:**

- (1) Cost of PZP-22:** I don't know; it was provided by the BLM, but I've been told by Dr Rutberg it is much more expensive than native PZP, and for that reason is not recommended for boosting. We did administer 22 to some mares that had previously been primed with native, so technically we were using it for boosting.
- Education, training and certification required:** I received no special training for 22, just the standard training at the Science and Conservation Center in Billings for general darting.
- State-of-the-art methods for application (darting?):** 22 came to us in the form of pellets; there are three of them, and they are different colors. I understood each one represented the boosters and were time-released to perform over the period of 22 months. We mixed the PZP and loaded the dart as we normally would and then pushed each pellet down into the needle of the dart. It was quite "fiddly" and took longer to do than simple dart loads. We used our standard dart guns. This process was recommended by the HSUS.

## APPENDIX

- 4. Frequency and Timing of Injections for Maximum Efficacy:** 22 is designed to include the primer dose and subsequent boosters, and theoretically would be administered once every two years. We would follow the standard recommendations for darting: ideally, early spring for the initial primary dose. The benefit is that you don't have to find a mare after she's received the primary dose to inoculate her with a booster, and you don't have to dart that mare yearly. So instead of finding and darting a mare three times in two years, we would only need to find that mare once. With a large HMA such as SWB and the number of mares we have, this is beneficial.
- 5. Long-term Effects on the Fertility of the Mares:** There is a rumor that 22 may cause permanent sterility if administered to young fillies; per Dr Rutberg this is just a story and made up. The darting of mares in SWB has been haphazard and, most often, until this year, based on opportunity. It is hard for me to say what success we are having. I have tried to analyze data, but I'm not an analyst, and it simply makes my head spin. I can say we have definitely seen a difference this year, finally, in the foal birth rate. We went from July 17 to Aug. 28 without a report of a new foal. We still are finding them, and there will be a few more yet, but I'm very optimistic. While the number of foal-eligible mares increases, our foal birth rate decreases!!!

# Success Stories

**Challis Herd Management Area, Idaho, and Wild Love Preserve**, Andrea Maki

See <http://www.horsetalk.co.nz/2016/05/08/wild-horse-andrea-idaho-challis-mustangs/#axzz4Hvq2IKAg>

**CANADA:** “Report to the Community: Alberta Wild Horse Contraception and Field Monitoring Program (Spring 2015 – Spring 2016)”

<https://wildhorsesofalberta.com/report-to-the-community-field-monitoring-contraception/>

**“A Wild Horse Scientist’s Legacy”** – about Dr. Jay Kirkpatrick – by Charlotte Roe

<http://www.thecloudfoundation.org/images/pdf/AWildHorseScientistsLegacy.pdf>

## **Additional Success Stories**

- <https://www.blm.gov/programs/wild-horse-and-burro/partnerships/McCullough-Peaks>
- <https://www.blm.gov/programs/wild-horse-and-burro/partnerships/little-books-cliff>
- Adoption success stories: <https://www.flickr.com/photos/mypubliclands/sets/72157674369054370>

# Success Story

## Stewart Creek

### *A Wyoming Wild Horse Opportunity*

October 2016



Dear Friends;

In early October, Quinn and I visited the beautiful Stewart Creek mustangs with Lynn Hanson, our friend and fellow wild horse advocate. It was a beautiful day in southern Wyoming just 20 miles north of Rawlins.

Being out here with these beautiful, family loving, freedom loving icons of the West reminds me of why we fight to preserve them. Their home is over 230,000 acres of sagebrush valleys and windswept rims along the Continental Divide.



The first time I got a look at these robust and colorful horses was a quick drive-by in winter. Ann Evans and I were traveling from Riverton to Rawlins and we were thrilled to see a family band just a short distance from highway 287/789 about 20 miles north of town.



When I left this last time, there was a colorful group of five bachelor stallions only 100 yards off the highway in nearly the same spot as the winter band of wild horses.

After we got back to Colorado, Lynn sent me this stunning picture, taken by her husband, Chad, of a spectacular chestnut stallion. I love the appaloosa mare in the back looking on!



We encourage you to try your hand at finding them. If you have a high clearance vehicle you can enter the



range on a number of sandy roads. Take your binoculars to verify that these often-distant dots are real wild mustangs!

Happy Trails!  
Ginger

P.S. As a bonus, you are likely to see hundreds of fleet-footed pronghorns and a cottontail or two. Quinn was particularly fascinated with the rabbits!





## **VOLUNTEER RESOURCE GUIDE**

The opinions expressed here are those  
of the volunteer contributors.

Send suggestions or requests for updates to:  
[guide@whbvresourcecenter.org](mailto:guide@whbvresourcecenter.org)

Our goal here is not perfection.  
Our goal is to provide a working guide for advocates and volunteers,  
to be updated by advocates as we learn and grow together.

**June 21, 2017**