

Honest Horses: A Portrait of the Mustang in the Great Basin

Written by Steve Pellegrini, Science Education Consultants, Inc.
Created to accompany the Nevada Touring Initiative's Traveling Exhibition Program



EDUCATION GUIDE



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Front Cover:

Out in the Great Alone
by Paula Morin
Giclee Print made from handpainted
black & white photograph
19 1/4" x 24 5/8"
1998

Home on the Range
by Paula Morin
Giclee Print made from handpainted
black & white photograph
19 1/4" x 32 1/2"
2000

honest horses



INTRODUCTION



Voyager on a Sagebrush Sea
by Paula Morin
Giclee Print made from handpainted
black & white photograph
19 1/4" x 25"
2000

Wild horses conjure up an image of mythical proportions. Not only are they a reminder of our country's emergence as a nation, their role in the evolution and history of the American West and their impact on Native American culture is profound. As a cultural icon enshrined in our collective imagination, the mustang remains as mysterious and enduring as the bald eagle, the grizzly bear, and the wolf.

Over fifty-percent of this country's wild horses live in Nevada's Great Basin—a vast, high desert etched by more than 160 mountain ranges stretching from Utah's Wasatch Range to California's Sierra Nevada. Sometimes called the "Big Empty", the Great Basin is a stark and fragile region rich in minerals, plants, and animals. However, unlike livestock, which are harvested, or wildlife, which are hunted, there are no natural predators to control wild horse populations. Overgrazing and lack of water can make large herds of horses a threat to this fragile environment—a danger to themselves, as well as to the wildlife and livestock that share the open range with them. Although wild horses are protected by federal law, the problem of how to humanely care for and manage excess numbers of these animals remains unresolved and often misunderstood by the public.

Honest Horses: A Portrait of the Mustang in the Great Basin presents an uncommon view of the significance of the wild horse to the entire region. The original photographs and narratives were made during 1999–2001, during which time Paula Morin photographed wild horse herds in their natural surroundings and recorded her discussions with people whose lives are most intimately connected with them. These impressions are complemented by excerpts of her conversations from the field and are accompanied by traditional poems about the wild horse compiled by Idaho folklorist Andrea Graham. A synergy of image and word portrays the intricate relationship of wild horses to the culture and landscape of the Great Basin—from yesteryear to the present.

This exhibit was curated by Paula Morin and is part of the Nevada Arts Council's Nevada Touring Initiative-Traveling Exhibition Program, which is funded by National Endowment for the Arts and the Nevada State Legislature. The Nevada Arts Council is a division of the Department of Tourism and Cultural Affairs.

EDUCATION GUIDE OVERVIEW



Wild horses are a prominent component of the desert ecosystem of the Great Basin. Embroiled in controversy, it is not easy to find unbiased information about them. Some would like to see them protected while others would like to see them vanquished. Still others want them managed at reduced numbers. How to remove them and what to do with them afterwards remain contentious issues.

Honest Horses: A Portrait of the Mustang in the Great Basin is an attempt to provide an unbiased look at how these animals fit into the scheme of things, to provide a clear perspective. These lessons will allow students to come up with their own ideas and feelings regarding wild horses. Where do wild horses live? What are their environmental requirements? How do they impact other animals and other interest groups who use public lands? What are the emotional ties that inextricably link horse to humans? Honest answers to these questions are not always easily found. Many involved with wild horses would tell you management of these herds represents one of the most serious ecological issues facing the ecosystems of the Great Basin.

Steve Pellegrini wrote these series of lessons to accompany the exhibit and assist the different exhibit viewers evaluate the historical and cultural importance of horses to our species. They will explore differences between wild and domestic horses. What have been the attitudes concerning wild horses over time and are these attitudes realistic or colored by bias and emotion? Students will have the opportunity to engage in interdisciplinary study to consider the realities of wild horse management.

These lessons are designed to be appropriate for high school and college age students.

Basin, Range and Mustang Trap
by Paula Morin
Giclee Print made from handpainted
black & white photograph
23 1/2" x 18 3/4"
1999

Family Ties
by Paula Morin
Giclee Print made from handpainted
black & white photograph
19 1/4" x 22 5/8"
2000

honest horses



LESSON ONE: Class Discussion



Too Wicked to Keep, Too Noble to Kill
by Paula Morin
Giclee Print made from handpainted
black & white photograph
22" x 19"
1999

Wild Horses and the Landscape

Objective

Students will research and discuss how wild horses came to be such a major component of the Great Basin Landscape. They will discuss some of the problems they present resource managers.

Background

One week before visiting the exhibit have students research wild horses on the internet, in newspapers, and in the library. Have them consider the following research questions as a focus of their pre-exhibit research:

1. How did wild horses come to be such an integral part of the Great Basin landscape?
2. What law/laws protect the wild horse?
3. What is the difference between a wild and a feral animal?
4. Research and report some attitudes in your locality regarding wild horses.
5. Is the wild horse a "Black Beauty," or are they runted "fuzz tails?" Can they be both? And if so, when?

Students should be given the following discussion questions **one day before they view the exhibit**.

1. What government agencies are responsible for managing wild horses? What are some of the management problems they are confronted with?
2. Cite examples that, as some assert, we might be "loving them to death."
3. From what you learned by viewing the exhibit, would you say wild horse numbers have stabilized? Are there too few or too many wild horses? What evidence, gleaned from the exhibit, do you cite to support your conclusion?
4. Today, wild horses are gathered by helicopters. Is this a cruel and inhumane practice? Are there other alternatives? Compare and contrast the current method of gathering horses by helicopter with other past or present techniques of wild horse capture.
5. Cite some of the reasons why the wild horse population has grown so dramatically over the past several decades. How was it kept in check prior to that time? Why are those methods no longer workable?
6. How would you manage the Great Basin's wild horse population if this was completely within your control? Support your ideas with information gleaned from the exhibit.
7. What happens to the wild horses after they are taken off the range?

Bachelor Bunch
by Paula Morin
Giclee Print made from handpainted
black & white photograph
19 1/4" x 24 1/2"
2000

View the Exhibit

Instruct students to take careful notes.

Follow-up Activities

- Have students form teams and select one question from the list under "discussion questions" above. Give them time to go over their notes and discuss their question. Have them present a report to the class in which they give their answer and opinion. Students should be required to challenge the presenters with contrasting points of view.
- Give a creative interpretation of your view on discussion question number 3.
- Create a collage of pictures, newspaper articles, provocative comments, etc. that represent your view on one or more of the discussion questions.
- Invite a guest to visit the class who has knowledge of wild horses. Possibilities might include:
 - a. BLM wild horse specialist
 - b. wild horse advocate
 - c. wildlife manager/biologist
 - d. mustanger
 - e. representative of the tribe who has experience with wild horses
 - f. rancher
 - g. wild horse trainer
 - h. cowboy poet
 - i. wild horse veterinarian
 - j. wild horse adopter



Lesson One: Meets the following Nevada Standards

Science Standards: 15.8.2 15.12.1 15.12.2 16.12.4 17.12.3 18.12.4 19.12.1

Arts Standards: 2.12.4 3.12.2 6.12.3

English Language Arts Standards: 8.12.1 10.12.1 10.12.4 11.12.1 11.12.2 11.12.3

LESSON TWO: Class Debate



Wild Horse Fever
by Paula Morin
Giclee Print made from handpainted
black & white photograph
19 1/4" x 27 1/2"
1999

Wild Horses and Resource Management

Objective

Students will explore attitudes concerning the value of wild horses on public lands in the Great Basin and the west and how or if they should be managed. They will engage in debate to explore a variety of points of view regarding wild horse management.

Background

By viewing the exhibit *Honest Horses: A Portrait of the Mustang in the Great Basin*, students will witness powerful images of wild horses that depict the uncertainties of their life in a desert ecosystem. These images portray the realities of what happens when herd numbers outstrip resources necessary to sustain them.

As a supplement, students could also spend time examining newspapers for articles on issues surrounding wild horses such as pending BLM removals. Materials are available through WHOA and other wild horse advocacy groups as well as from the Bureau of Land Management. Students could also interview ranchers, hunters, hikers, BLM personnel and others who have firsthand knowledge and opinions regarding wild horses and how they impact the desert ecosystem.

Activities

Divide the class and stage a debate. Give students controversial, value laden statements to consider so they can react to the polar points of view one encounters whenever the topic of wild horses comes up. Possible topics might include:

- Wild horse numbers have not increased appreciably over the past several decades, and so their numbers should not be reduced.
- Wild horses should have every bit as much right to resources as do other wildlife and domestic livestock.
- The law that protects wild horses, the Wild Free Roaming Horse and Burro Law of 1971, should be repealed and management of wild horses turned over to the state.
- Shooting, removing, trading wild stallions with other herds in order to manipulate or upgrade the appearance or quality of wild horse herds would be a desirable management component.
- Wild horses should be declared a game animal so they can be hunted like deer.

- All domestic livestock should be taken off public lands to make room for wild horses.
- All wild horses should be removed from public lands to make room for domestic livestock grazing.
- Wild horses should be removed from all public lands with the exception of several refuges where people could go see them.
- Wild horses should just be left alone. Humans have no right interfering with the lives of other animals. If they die of drought this is simply "nature's way."
- Wild horse herds should be kept in check by birth control methods such as gathering and gelding stallions and putting birth control implants in mares.
- Wild horse evolved in North America up to 10,000 years ago. Since the Spanish reintroduced them to their native habitat, we should consider them indigenous wildlife.

Assessment

- Write a summary statement of the various ideas that surfaced during the debate and give your opinion. Back your opinion with citations from the literature or with things you saw in the exhibit.
- Write a persuasive essay in which you advocate your feelings and opinions regarding wild horses. Pick one or more of the questions from those listed above under "Activities" as a starting point.
- Ask a teacher in another class or in the elementary or middle school if you might give a brief presentation to his or her class on your persuasive essay.

- Write a rebuttal to a statement you read somewhere in the exhibit. Share and defend your point of view with the class.
- Write a short story that describes a rancher's struggle to keep his livestock operation going while an increasing wild horse population is necessitating he cut his allotment.
- Create a visual representation using a medium of your choice to depict your response to one or more of the possible topics listed above. Present your work to the class and be prepared to explain and defend the point of view presented.



Lesson Two: Meets the following Nevada Standards

Science Standards: 15.8.2 15.12.2 16.12.4 17.12.3 18.12.4 19.12.1 19.12.3

Art Standards: 1.8.3 1.12.3 2.12.2 2.12.4 3.8.3 5.8.1 5.8.3 5.12.4 6.12.3

English Language Arts Standards: 2.8.1 2.12.1 4.12.3 5.8.1 5.8.3 5.12.5 8.12.1 9.8.2 11.12.1 11.12.2 11.12.3

LESSON THREE: Research Activity



Racing With Horses
by Paula Morin
Giclee Print made from handpainted
black & white photograph
19 1/4" x 27 5/8"
1999

Wild Horses and Desert Ecology

Objective

Students will list biotic and abiotic components of the desert ecosystem of the Northern Great Basin. They will explore how wild horses fit into this ecosystem.

Students will describe the niche wild horses occupy and how they impact other components both biotic and abiotic.

Background

Students should research the desert ecosystem of the Northern Great Basin on the internet. Helpful information will also be found in works by: (See bibliography on page 15.)

- Symanski
- Ryden
- Budiansky
- Berger
- Wyman
- Amaral
- Dobie
- Thomas
- Trimble
- Grayson

USGS or other maps will give an idea of the relief of the land which will be helpful in gaining some appreciation for where wild horses live.

Activities

- Students can learn where wild horses are concentrated by contacting the Bureau of Land Management Office nearest them.
- Have students plot herd densities on maps they create themselves.
- Students, after viewing the exhibit, should examine the land where wild horses live. They can do this by reading one or more of the above works or by taking a field trip.

Questions they should consider might include:

1. What do animals eat here?
2. What are the major predators and what is their prey?
3. Where do they find water?
4. What is the limiting factor that is thought to control wild horse numbers?
5. What is their reproductive rate?
6. What ecological niche do wild horses occupy in this ecosystem?
7. Do wild horses have special adaptations that allow them to survive in the Great Basin desert?
8. How do wild horses compare morphologically and physiologically to domestic horses?
9. Describe the abiotic features of the land. What is the relief? What is the annual precipitation? Is this precipitation distributed evenly over the landscape?
10. Is there a relationship between land relief and herd concentration?
11. Describe some ways wild horses might impact their habitat. Consider their influence on water holes, vegetation, soil, and other animal species.

Students should write an essay in which they address the above questions. It might be helpful if they write this from the perspective of someone from a distant land charged with accurately reporting what they find the Great Basin Desert to be like. Their essay must be accompanied by their map that shows where horse herds are concentrated. The map should also show the boundaries of the entire Great Basin as well as state lines. How would attitudes found in different localities affect wild horse management issues from place to place?

Follow-up Activities

Report your essay orally to class.

Present a talk on wild horses and desert ecology to students in other classes and in lower grades.

Write a poem in which you describe the hardships wild horses face when they encounter periods of depleted resources such as drying water holes.

Using any medium of your choosing, develop a work of art that communicates what you see as the role wild horses play in the Great Basin ecosystem. Present your work for critique by the class.



Running Shadows
by Paula Morin
Giclee Print made from handpainted
black & white photograph
19 1/4" x 23 7/8"
1999

Lesson Three: Meets the following Nevada Standards

Science Standards: 15.12.2 15.12.4 16.8.2 16.8.4 16.12.1 17.8.1 17.8.2 17.12.3

Arts Standards: 1.8.3 1.12.3 2.12.2 2.12.4 3.8.3 5.8.1 5.8.3 5.12.4 6.12.3

English Language Arts Standards: 2.8.1 2.8.3 2.8.4 2.12.1 4.12.1 4.12.2 4.12.3 5.8.1 5.8.3 6.12.7

LESSON FOUR: Values Clarification



Last of the Bunch
by Paula Morin
Giclee Print made from handpainted
black & white photograph
19 1/4" x 27 1/2"
1999

Horses and Humans

Objective

Students will explore the cultural, utilitarian, and emotional ties between humans and horses. They will describe how man's attitudes toward wild horses have changed over time and explore reasons as to why this has happened.

Background

Students should be instructed to carefully read captions that accompany images in the exhibit for statements that betray attitudes about horses and about wild horses in particular. They should be vigilant to changes in attitudes through time. Students would find the 1950's film "The Misfits" or the film "Spirit" interesting at this time. It might also be suggested they read "Smoky and the Cowhorse" by Will James and "The Literary Horse." (See bibliography on page 15.)

Activities

1. Students should pair up to discuss what they learned from the exhibit in reference to the following questions:

Describe the general feeling and attitudes of resource managers regarding wild horses.

- How would you compare/contrast the historic attitudes with current attitudes regarding wild horses and their presence on the public lands?
- Will James said "everybody is against shooting 'em, man is against shipping 'em out to packing houses..." What are these packing houses he speaks of? What was going on in the world at the time he wrote this, and what role did the packing houses and the wild horse play in regards to the economic situation in the United States then?
- Do you see evidence the wild horse has sometimes been shrouded in a sort of mysticism? If so, does this notion still exist?
- Contrast the wild horse of western lore to the wild horse of today. What evidence do you see that suggests today's wild horses do not compare favorably to wild horses of bygone years, at least in the minds and memories of some people?
- People usually have little problem with how other animal populations are managed. Deer are harvested by hunters, for example. What historical and cultural attitudes make it problematic for some people to consider management of wild horses by population reduction?

Natural Balance
by Paula Morin
Giclee Print made from handpainted
black & white photograph
19 1/4" x 24 1/2"
2000

2. What are the implications of removing horses off the range? Students should pair up to discuss the following. Afterwards they are to present their views to the class.

- Should we leave wild horses indefinitely in holding facilities? What are the alternatives?
- What happens to horses that are “unadoptable” by virtue of their health, temperament, age, etc?
- It is more humane to leave them on the range where they die of starvation or drought? Or is it better to remove them and place them in holding pens where they are not active?
- What constitutes “quality of life” for a horse? What constitutes a “humane death” for a horse?

3. Plan a field outing to visit the Will James wild horse trap in Southeastern Nevada. This site is registered as a National Historic Landmark. Call the Bureau of Land Management or the Historic Preservation Office for details.

Assessment

- Write an essay in which you summarize your answers to the above questions. Make note of your peer’s attitudes regarding horses in general and, more specifically, regarding wild horses. Is the horse in some way special to our species? If so explain why.
- Write a ballad in which you describe a wild stallion and his defense of his band during a helicopter roundup. Is the stallion captured? How about his mares and foals?

Does he experience feelings and if so at what level? Are his feelings those of self preservation or is the horse capable of altruistic reasoning? Your ballad should put your reader into the mind of the wild stallion as he flees from the airplane.

- Create a work of art, using any medium of your choice, that shows a transition of how wild horses were regarded in J. Frank Dobie’s day to how they are regarded now by people who believe we have too many of them. Present your work for class analysis.



Lesson Four: Meets the following Nevada Standards

Science Standards: 16.8.2 16.8.4 16.12.4 17.12.1

Arts Standards: 1.8.3 1.12.3 2.12.2 2.12.4 3.8.3 5.8.1 5.8.3 5.12.4 6.12.3

Language Arts Standards: 2.8.1 2.12.1 4.12.3 5.8.1 5.8.3 5.8.6 6.8.1

Biographies

Paula Morin is a photographer, artist, and oral historian who for over ten years has immersed herself in the world of wild horses by reading about their evolution, behavior and development; observing and photographing them in their natural surroundings; and speaking candidly with individuals most deeply knowledgeable about them. With endorsement from the Nevada Arts Council, Paula was awarded a Rural Community Arts Assistance Grant from the National Endowment for the Arts and the U.S. Forest Service in 1999 to explore the significance, meaning and impact of wild horses in the remote high desert. The results of her two-year creative inquiry were arranged in the critically acclaimed national touring art exhibit, *Honest Horses: A Portrait of the Mustang in Nevada's Great Basin* and subsequently developed as an interdisciplinary learning component for the Nevada Touring Initiative. Raised in San Francisco, Morin graduated from Notre Dame des Victoires high school in 1962. She inherited an instinctive admiration for the horse from her father, a CBS radio broadcasting executive of French-Canadian descent. After graduating *magna cum laude* in art from Southern Oregon University, she pursued post-graduate work in art history and cultural anthropology at University of Arizona and Oregon State University, but eventually excused herself from academia by settling into life as a freelance photographer and field researcher. In 1992, Morin began fusing her appreciation for the cultural landscape of the American West with her affection for horses and the tradition of horsemanship alongside her accomplishments in the 19th century technique of handpainted black & white photography. Morin's original handpainted photographic images are included in several permanent collections, including the Buffalo Bill Historical Center in Wyoming, the Nevada Museum of Art in Reno, and the Martin of Tours Collection of Northwest Art at Saint Martin's College in Washington. A selection of giclee prints from the *Honest Horses* exhibit are also available as limited edition prints. Morin currently resides in the Seattle area.

Steve Pellegrini is a retired high school biology teacher who has also taught math and Nevada History at Yerington High School. A recipient of numerous teaching awards including the coveted Presidential Award for Excellence in Science and Math Teaching, he taught for thirty-one years. He has also served as a part time instructor for Western Nevada Community College. As a graduate student he studied home range and territoriality of wild horses in the Wassuk Range of West Central Nevada. An avid naturalist, he has an abiding love for the Great Basin desert where he has spent his life. Pellegrini was born and raised in Yerington, Nevada and educated at the University of Nevada, Reno where he received his Bachelor of Science degree in wildlife biology in 1968 and his Master of Science degree in zoology in 1971. After beginning his teaching career he kept up on his study of wild horses and eventually expanded his scientific expertise by identifying and cataloging over four hundred plant species that grow wild in the Nevada desert. He is also a published author. Pellegrini and his wife, Debbie, reside in Yerington where they own a mini farm adjacent to the desert.

Bibliography & Web Resource

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Web Resource

Wild Horse Organized Assistance [WHOA]
<http://www.wildhorseorganizedassistance.org>

The Phantom and The Broomtail
by Paula Morin
Giclee Print made from handpainted
black & white photograph
19 1/4" x 25 3/4"
2000



honest horses

Nevada Arts Council

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Education Guide was written by Steve Pellegrini with contributions by Paula Morin, Exhibit Curator and Fran Morrow, Artist Services Coordinator, and graphic design by Lori Kunder, Kunder Design Studio.

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