Frontier Township Days & Mining Days
by Heather Duchow, Newsletter Writer

Longtime High Desert Museum (HDM) volunteers are familiar with the type of time travel possible at the Museum. This newcomer, however, is much less familiar with the phenomenon. The way Museum visitors reached the mid-nineteenth century on August 8th and 9th was quite simple. Museum guests merely exited the building near the Desertarium and turned left past the sheepherder’s wagon. A right turn out of the Desertarium usually leads to 1904, while a left turn leads to the otter exhibit. Somehow on these particular days, a left turn led, instead, to a mid-nineteenth-century tent town.

Why was the open meadow near Dig, Crawl, Climb! populated by a neatly arranged avenue of canvas tents? It had everything to do with the gold recently discovered nearby. Miners were hoping to strike it rich while panning for gold, and other inhabitants of the tent town were also there for financial gain. Some folks were making a brief layover on their journey from “back east” to the Willamette Valley, and this was a good opportunity to earn some money to replenish their depleted supplies. Others might have been planning to stay as long as there were miners to whom to sell their goods and services. Yet others may have intended to settle on a nearby claim but needed to accrue enough resources to build cabins and other permanent structures. Although there were various reasons people pitched their tents nearby, everyone was there because of the mine and everyone was busy.

The miners (mostly twenty-first-century children) panned for gold near the town. They paid the clerk at the land office $2 for a mining claim, and then nineteenth-century teens (HDM teen volunteers and Living History interns) assisted them in the gravel beds by demonstrating panning methods. If the miners found gold, they took it to the assayer to have it valued and exchanged for “legal tender” that was good at the Silver Sage Trading Store.

Any children not working in the mine could be found attending school or assisting the various craftsmen of the tent town.

Lessons were taught in the school tent, which was furnished with benches and slates for the students, and a desk table and chalkboard for the teacher, Mrs. Ruby Borden (Christine Frey). Mrs. Borden’s young teaching assistant (an HDM teen volunteer) helped students practice writing their names with a dip pen and inkwell. When lessons were over, young Museum guests, along with their parents and other adult Museum guests, visited the craftsmen and wives of the tent town (members of the Northwest Civil War Council who normally portray the civilian tent town for Civil War reenactments) to learn about coopering, tinsmithing, woodworking, firefighting, cooking and preserving food, basket weaving, sewing, and general aspects of life in the tent town. Kids could help the cooper (Tom Harper of Hillsboro, OR) assemble a barrel, help the woodworker (Royce Quiring of Bend) power the lathe with the foot treadle,
help the tinsmith (Gary Makey of Idaho Falls, ID) form sheets of tin into useful objects, and learn from the fire company foreman (Jim Tormey of South Burlingame, OR) about leather fire hoses. Visitors could see that the wives of the tradesmen were resourceful and industrious. The cooper’s wife (Cathy Harper) and the fire foreman’s wife (Shirley Tormey) both sewed, while the tinsmith’s wife (Nancy Makey) wove baskets, and the woodworker’s wife (Teresa Quiring) displayed the various types of foodstuffs available to people on the trail and in the tent town.

Only the bravest visitors approached the medical tent where an unidentified man lay unconscious with gunshot wounds to his shoulder and sizeable splinters impaling his leg. If called upon by the medical caregivers (HDM teen volunteers, Living History interns, and Living History Curator, Linda Evans) to assist, visitors listened for the man’s heartbeat with a wooden stethoscope and used forceps to carefully remove the lead balls from the gunshot wounds and the splinters from his leg. As the injured man did not regain consciousness during the weekend, how he came by his injuries remains a mystery.

If anyone could tell whether the lead balls removed from the unconscious man’s shoulder provided any clues as to what had happened to him (other than that he was shot), it would be the firearms experts in the tent town (volunteers Frank Graham and Steve Magidson). They were, however, quite busy providing information to visitors about firearm developments from the time of the American Revolution through the late 1890’s. This tent was a favorite of kids and adults alike. The kids enjoyed the excitement of the musket-firing demonstration (performed by Associate Curator of Living History, Ethan Mark), and the adults were fascinated by the specifics of how the various firearm improvements changed the way firearms were loaded, primed, and fired. The firearm tent stands as an example of how all the reenactors did an excellent job of engaging both kids and adults. This was especially fitting this year since Mining Days and Frontier Township Days took place on a summer weekend (as opposed to a school day), young visitors got to experience the activities with their families. There were also a good number of adult visitors without kids who enjoyed the event. If other visitors learned even a tiny fraction of what I learned in the mining and tent town, then all those who worked to make this event enjoyable should be congratulated for a job well done.
Introducing Chris Frey aka Ruby Borden, Living History Volunteer  
by Lynne Schaefer, Newsletter Writer

If you saw the Museum’s *Strong Medicine* and *Bears and Wolves* exhibits, or visited the classroom in the Miller barn or Silver City in the Spirit of the West, you’ve already met Chris Frey, also known as schoolmarm Ruby Borden. She is in her ninth year as a Museum volunteer.

“Students at the introductory class for Living History characters were told to choose a family name for our character so it would be easier to remember. I chose my husband’s mother’s maiden name. My character is based on a great aunt who taught in a one-room school in Nova Scotia.”

Chris speaks of her historically accurate period clothing down to each detail. For example, the frames on her corrective eyeglasses are vintage 1800’s. Her search for authentic frames located not only a pair for indoors but sunglasses as well for her corrective lenses. She wore an 1830 Museum dress as the minister’s wife in the *Bears and Wolves* exhibit. Since then, she has researched period costumes for accurate collars, necklines, waistlines, skirts, overskirts, underskirts, hems, and buttons, sewing not only one outfit but changes of blouses (one smocked) and jackets, hats, bags, and important accessories to extend an outfit. Chris finds most period buttons and accessories on E-Bay.

“My cotton bustle dress with pink roses was the first dress I made for Ruby Borden,” she said. “I wear it in Silver City spring and fall. I made a navy wool bustle dress for winter 1885.

“Period costumes use only cotton, wool, linen, silk, or a combination,” Chris said. “My silk polonaise 1870-1880 is a favorite I wear to Rendezvous. I sewed the handmade linen tassels handed down by my husband’s grandmother’s great aunt on it.”

As the doctor’s wife assisting Mortimer the dummy in the *Strong Medicine* exhibit, Chris wore an 1865 dress with pagoda sleeves and hoops. During the recent Frontier Township Days, she wore an 1850-1860 Oregon Trail dress she made from material bought at an estate sale.

Chris flips through an 1884-1885 booklet entitled *Hygiene for Young People* to a page illustrating a corset. “An authentic corset costs about $100 to make,” she said. “Mothers taught their young daughters to wear a corset at an early age so their waistline measured 20 inches by age 16. As a result, all organs were pushed down and muscles atrophied causing digestive disorders and the need for fainting couches.

“I also made an 1890 cycling outfit with bloomers. When I attempted to ride a high wheeler (a period bicycle with a small back wheel and a five-foot high front wheel), I couldn’t quite pull myself up onto the seat and cracked two ribs on the seat. I thought this living history can only go so far,” she laughed.

She is nearing her goal to own historically accurate costumes for each decade of the 1800’s.

Space does not permit an inventory of the authentic school supplies contained in the basket beside her desk. Today’s youngsters attempt to write their names with a dip pen in Spenser cursive. A replica spelling game of a set of wooden slat puzzles was made by volunteer Burt Douglass. See slate pencils, pre-1900 marbles of fired clay, a Miser’s purse with an 1853 penny, and learn about laudanum, spill planes, and a vesta.

For about five years, Chris and her husband, Richard, participated in the annual Silver City, ID, re-enactment at the school and church wearing period clothing and spending the weekend in the historic Idaho Hotel.

Born in Rochester, NY, Christine is the eldest of two girls and one boy. She lived in Connecticut, grew up in Syracuse, NY, and attended college in Grove City, PA, where she met Richard Frey in English class. “We became engaged his senior year, my junior year. I taught math at Maynard High School in Massachusetts before we married in 1969. Richard joined the Air Force and was stationed at Hanscom Field before we moved on to Albuquerque, NM, Warren, OH, Pittsburgh, PA, Sevierville, TN, Cañon City, CO, and Quincy, IL.

“We visited the Museum 18 years ago when I came to Bend to look for a house( Richard was already here working for APT, now Microsemi) and we bought a Museum membership before the house!” Chris said. Richard, also known as Dick, is a Spirit of the West tour guide.

Their married daughter, Leah, lives in Quincy, IL, with their two grandsons, 10 and 14. Their son John, manager at Hutch’s Bicycles in Bend, is planning to wed next year.

Chris and Richard enjoy biking, hiking, and birding (with a bird book from each of the states where they have lived). They are active in the Bond Street Methodist Church where Chris works toward the fall bazaar. The 67-year old stays in shape with a ballet class once a week. She has performed in *Sleeping Beauty* and *The Nutcracker*. 
Art of the West Exhibit
Juried Art Work Available for Purchase or at the Auction - High Desert Rendezvous August 29

Photos by John Williams
Cougar Behavior on the Urban Wildlife Interface
by Siobhan Sullivan, Newsletter Editor

There was a big crowd at the Museum on August 13 to listen to a lecture and panel discussion about cougars. The big cats have been in the news lately as they have wandered into the city limits of Bend. The presenter was David C. Stoner, Post-doctoral Fellow at Utah State University, who did work related to cougars for both his master’s thesis and doctoral dissertation. He is currently involved in cougar research in desert mountain and coastal mountain areas of western North America. In the beginning of the lecture, he asked the audience if they thought cougars were terrifying, tremendous, or simply tenacious. The opinions on how cougars should be managed are polarized with some thinking they should be destroyed and others thinking they should be preserved at all costs. The lecture educated the audience with facts about cougars based on current research and dispelled some of the myths.

This adaptable species can be found in a wide variety of habitats. In fact they have the widest latitudinal distribution of any terrestrial animal. Cougars tend to stay away from the lowest and highest elevations and the driest locations. They may be more aptly named a “foothill lion” instead of a mountain lion. They feed on “almost anything” including deer, elk, bighorn sheep, livestock, and even porcupines and skunks. Cougars have been observed in Urban Wildlife Interface (UWI) areas because they are productive and predictable sources of food. However, living there comes with some risks such as being hit by cars. Cougars often traverse urban areas to get to better habitat.

Developments are being built where cougars formerly lived and change in land use is their biggest threat. Urban growth decreases the connectivity of good habitat. Cougars usually die due to starvation, injuries inflicted by their prey, fights with other cougars, and by hunting. They are a resilient species that produce large litters of cubs. Though they are no longer present in parts of their former range, the only endangered populations are in Florida. They are extremely difficult to count but in Oregon the population is estimated to be between 6,000 an 7,000. They are most common in the Northeast part of the state and in the Southwest Cascade Mountain areas.

The fear many people have of cougars and other predators is deep seated in their psyche. Remember watching The Wizard of Oz when you were a child and hearing them singing about “Lions and tigers and bears, Oh my!”? This story and other childhood tales cast predators as something to fear. A table was shown that summarized the fatalities caused by bears, cougars, deer, bees, dogs, and lightning. Cougars were on the bottom of the list with only 0.15 fatal attacks per year. No cougar has ever attacked or killed a person in Oregon in recent history. Recommendations were made about actions to take in cougar country such as always walking with other people or dogs, avoiding jogging at dawn or dusk, and avoiding acting like prey (i.e. not running if confronted by one).

The panel discussion group included Darren Clark and Corey Heath of Oregon Department of Fish and Wildlife, David Williams of U.S. Department of Agriculture, Wildlife Services, and David Stoner. A question was asked about what the proper action would be if you sighted a cougar. There are actually a lot of calls about cougars in Central Oregon. If they are seen in the city limits close to densely populated areas, the animal may be killed, though it depends upon the specific situation. These cougars are often young males and relocating them might lead to them attacking humans or their pets and livestock in another location. Cougars might also be killed by the male in the territory they are moved into. A question was asked about when the 2006 Oregon Cougar Management Plan would be updated. There is a committee that will be looking at it soon and stakeholders should have an opportunity to provide input. When asked about dealing with cougars coming into towns in the future and what could be done about it, the answer was that there is a need for additional research, especially on the importance of corridors between habitats. Accommodations for both developers and environmentalists need to be considered in land use planning. The wildlife underpasses on Highway 97 near Sunriver were described as examples of how connectivity between habitats can be successfully designed. Biologists are trying to incorporate known migratory corridors into future developments in Deschutes County.

Photo by John Williams
The High Desert Nature Team is a group of volunteers and associated Museum staff that interpret some of the fundamentals of local ecology for our visitors. The team began in 2006 as a group of volunteers working with Larry Barren, Curator of Education, researching medicinal uses of native plants by Native Americans. Kathleen Cooper made the first plant collections and herbarium specimens for use by the Museum. The Photography Team provided photos of local flora in various stages of their life cycles for display on a board made by Jim Langton for the team’s first interior exhibit. Jim Langton served as the first team leader followed by Thad Grudzien in 2014.

The present nature team has about twelve volunteers. During the Museum’s most active season, volunteers lead daily interpretive ‘Nature Walks’ along the outdoor trails and point out important flora and fauna. The team members come from varied backgrounds: some are from the Forest Service, others are former academicians, interpreters, animal trainers, or from pharmaceutical sales, Corps of Engineers, and more. They are experts in facets of the high desert and contribute their individual qualities to the Museum’s mission.

Nature Walks are scheduled for 10:00 am and are the daily kickoff of Museum presentations. These Nature Walks serve as visitors’ initial introduction to the basic ecology of the Museum grounds and help to establish a foundation for further interpretive talks given throughout the day. It is our intention to spark interest and provoke thought in Museum visitors to investigate for themselves the amazing features of various high desert regions.

The walks are announced over the public address system and, usually, a group of two to twenty (sometimes even more) visitors gather at the team’s exhibit in the Hall of Plateau Indians near the Desertarium to begin the interpretation. While each volunteer brings their own particular interest and expertise to their walk, they all give a focused presentation on important local desert flora such as bitterbrush, manzanita, and Oregon grape as well as wildlife – Dark-eyed Junco, Red-breasted Nuthatch, or Golden-mantled Ground Squirrel observed during the walk. Different aspects of the desert experience are emphasized. For example, visitors are encouraged to identify the sweet smell of ponderosa pine bark, see the elastic quality of the veins in dogwood leaves, or watch the ‘run-run-run-stop’ foraging behavior of a robin. The interpretation also points out general adaptations of local plants and animals to conserve water in a xeric (dry) habitat like the shiny waxy cuticle on Oregon grape, the thickened leaves of manzanita, or production of metabolic water by some desert rodents as well as specific adaptations to periodic wildfires such as the thick, corky, insulating bark of ponderosa pine or the serotinous cones of lodgepole pine. Lodgepole cones usually need an environmental trigger such as fire in order to release seeds. Nature walks are intended to last 20 to 30 minutes, however, often some of the visitors will extend the walk with questions or later may return to the interior exhibit with further questions or requests for clarification and discussion of a point made during the walk.
Every day brings a new group of visitors to the Nature Walk. Although the basic themes of plant and animal diversity and of adaptations to wildfire and limited water are constant features of the walk, each interpretation is flavored differently by the unique blend of the visitors’ personal interests, insights, and knowledge. Just as each group of visitors is unique, each Nature Walk is different; it evolves, becoming its own unique phenomenon. It must take advantage of both predictable seasonal variation and, at the same time, unpredictable, spontaneous and lucky happenstance. A good interpretation should tap visitors’ characteristics; each walk involves the interpreters’ abilities to read the visitors and adapt on the fly to the ever changing qualities of the Nature Walk. The daily walks are a constantly new experience for all involved.

Some improvements are on the horizon for the team’s interior exhibit. A new wooden table will replace our collapsible one. A new display board will feature photographs of flora and fauna selected from the Photography Team’s archives.

In summary, The High Desert Museum Nature Team is a group of enthusiastic and talented volunteers that give the Museum’s visitors an introduction to some important features of local ecology. The team’s eclectic interests and expertise are united by our goal to inspire and motivate Museum visitors to explore, on their own, the marvels of the high desert ecosystem. For more information, please contact Thad Grudzien at tagrudzien@gmail.com.

Photos by Lee Schaefer & Siobhan Sullivan

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**Annual Meeting & Volunteer Recognition**

**September 18 at 6:00—8:00 pm**

**Hors d’oeuvres & no-host bar**

**Members Free; Non-members $5**

**RSVP:** www.highdesertmuseum.org/rsvp or 541-382-4754 ext. 241

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**Daily Fall Schedule Begins September 8th**

11:00 am Birds of Prey Encounter
11:30 am Porcupine Encounter
12:15 pm Reptile Encounter
12:45 pm Spirit of the West Tour
1:15 pm Carnivore Talk
2:00 pm Birds of Prey Encounter
2:45 pm Fish Talk

Living History hours change to 11:00 am—3:00 pm
2015

September

1-7  Raptors of the Desert Sky.  12:30 - 1:00 pm. Members $2; Non-members $3, plus admission. Kids 4 and under, free.

4   New Exhibit Opens. From the Vault: Edward S. Curtis’ the North American Indian.

5   Workshop: Scavenging Raptors and Non-lead Ammunition. 9:30 am - 4:00 pm. Free.

5   Thorn Hollow String Band. 11:00 am - 2:00 pm.

8   Otter Renovation Begins—Exhibit Closes.

8   Natural History Pub: Paleontology in the High Desert. McMenamins. Doors open at 5:30 pm. Program starts at 7:00 pm. RSVP.

11  Bat Walk.  7:30 - 8:30 pm. Members $3; Non-members $5. RSVP.

12  Exhibit Opening. Rain, Snow, or Shine. 10:00 am.

15  Lunch & Lecture: Creating By Hand Through Memory. 12:00 - 1:00 pm. RSVP.

17  Teacher’s Night Out. 6:00 - 8:00 pm. Early access 4:30 pm. 5:00 pm Ranch Tour and 5:30 pm Bird of Prey Encounter. Free. Call Erica Pelley at 541-382-4754 ext. 320 for more info.

18  Annual Meeting & Volunteer Recognition. 6:00 - 8:00 pm. Hors d’oeuvres & no-host bar. Members Free; Non-members $5. RSVP.

19  Mustang Awareness Day. 11:00 am - 3:00 pm.

24  Lunch and Lecture: Bioluminescence in the Sea: Flashlight Fish and Other Stories. 12:00 - 1:00 pm. RSVP.

26  Off-site: Discover Nature Festival. 10:00 am - 3:00 pm. Riverbend Park, 799 SW Columbia St., Bend, OR.

27  Exhibit Closes: Glow.

To RSVP: www.highdesertmuseum.org/rsvp or 541-382-4754 ext. 241

To pre-register: www.highdesertmuseum.org/program

October — Save the Date!

3   Thorn Hollow String Band. 11:00 am - 2:00 pm.

3   Weekend Workshop: Pika Research Field Trip. 9:00 am - 12:00 pm. Paired pricing - Members $10; Non-members $15. Each child $5. Registration and pre-payment required.

3   Miller Family Harvest Festival. 11:00 am - 3:00 pm. Free with paid admission.

3   Member’s Exhibit Opening: Tough by Nature: Portraits of Cowgirls and Ranch Women of the American West.  6:00 - 8:00 pm. No-host bar. Members Free; Guests $5. RSVP.


9   Exhibit Closing: Deadly by Nature.

10  Natural History Pub: Sage Grouse Endangered Species Listing Decision. McMenamins. Doors open at 5:30 pm. Program starts at 7:00 pm. RSVP.

11  Senior Day. Free Admission - Seniors 65 and older. 9:00 am.

13  Opening Reception: Sage Grouse: Icon of the Sagebrush Sea. 6:00 - 8:00 pm. No-host bar. Members Free; Non-members $5. RSVP.

13  Cascade Carnivores. 8:00 am - 12:00 pm. Members $10; Non-members $20. Registration and pre-payment required.

17  Cascade Carnivores. 8:00 am - 12:00 pm. Members $10; Non-members $20. Registration and pre-payment required.

17  Exhibit Opening. Sage Grouse: Icon of the Sagebrush Sea. 9:00 am.

19  Film Screening: In the Land of the Head Hunters. Doors open at 6:30 pm. Screening starts at 7:00 pm. No-host bar. Members $5; Non-members $5. RSVP.

19  Tales of Hallows Eve. 6:00 - 8:00 pm. No-host bar. Members $3; Non-members $5. RSVP.

19  Conversation Project: What We Want From the Wild. 6:00 pm. Free. No-host bar. RSVP.

24  Wildlife Road Ecology: Highway Underpasses for Wildlife. 8:00 - 11:00 am. Members $10; Non-members $20. Registration and pre-payment required.