

Chamber Spirit

VACC Activities in the basin.

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Editors Note: I had scheduled the following article for publishing in the May-June Newsletter. Unfortunately, or fortunately depending on one's viewpoint, I was pressed into service on the Tourism and Economic Development Conference and assigned a venue at Split Mountain, as far out of town as possible. I suspect this was by design since I had been bugging the Executive Director about cleaning his office. In any event, here is the real and complete story of:

"Danny and the Dinosaurs"

By Your Editor

As of late, much has been written and spoken of Vernal's Utah Field House of Natural History. Speeches have been made at Chamber, Rotary, etc. and verbosity aside, many hours and considerable effort have been spent in an attempt to acquire adequate funding for renovation. And the endeavor continues, day by day. And day by day, the museum opens and closes at the appointed hour, and the public views the artifacts and displays and goes on their merry way. Or so it would seem to the unenlightened. With the renovation efforts my curiosity got the better of me, so I set out to find out what made the facility tick, and being a "back of the bus type of person", I quite naturally entered through the back door.

Built in 1948, this year marks the fiftieth anniversary of the museum. The facility is permanently staffed by four dedicated individuals, one of whom fondly remembers traipsing the halls as a child, wishing she could be a part of it. Wishes do come true and Dr. Sue Ann Bilbey is now the museum Curator.

The museum is a State Park and Michael Nelson, who had dreamed of working in a museum, is the current manager of nine months. LuRae Caldwell is the Gift Shop Manager.

Last, and the glue that seems to hold the whole place together, is Danny Anderson whose title

is "Historic Replicator/Maintenance Specialist" and is the only title of it's type in the entire Utah State Park system.

Coming through the back gate, I passed a gas fired and briquette mobile barbecue with corn cooker mounted on a trailer complete with all the amenities. A Barbecue Grill was needed at one of the museum's annual events, and so Danny and an incarcerated assistant who was a good welder, built one out of scrap and bits and pieces Danny scrounged up.

Danny's efforts were evident everywhere, and I had not even gotten near the back door.

Danny keeps all the dinosaurs in the garden clean and painted, and is a perfectionist concerning details. This includes determining colors and mixing the paints himself, right down to air brushing the tyrannosaurus and placing tartar on its teeth. Dan says that "the actual color is a guess and the whole staff works as a team to come up with the color. A meat eating dinosaur is a hunter, therefore it probably has a camouflage color."

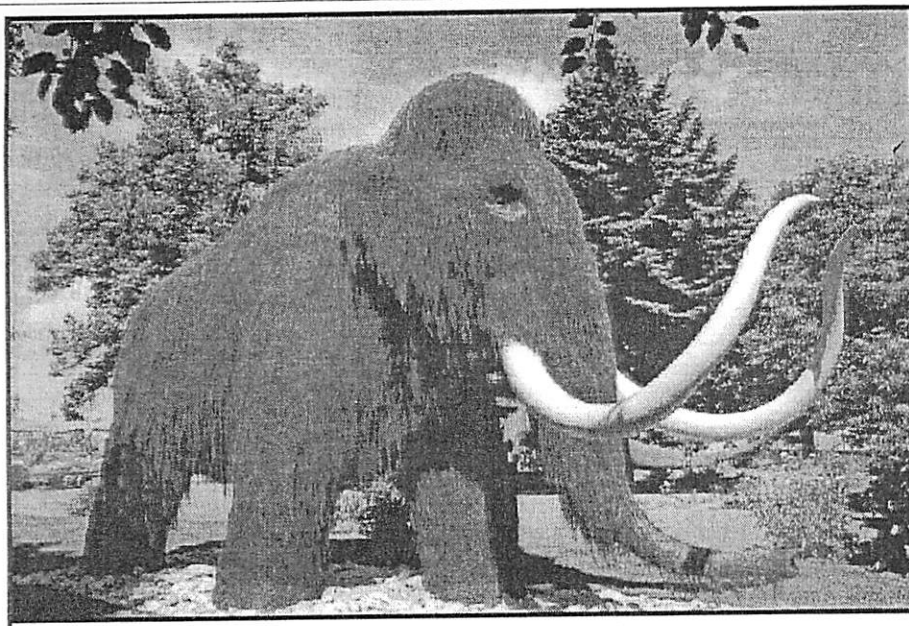
When the Woolly Mammoth became worn and tattered, as it is prone to do from time to time, Dan stripped all the hair off down to the fiberglass. He acquired hemp in 70 pound bales, soaked it, pulled it into workable strands and let it dry. He

then used a latex type caulk and glued the hemp onto the beast in layers, a hand full at a time, working from the bottom up. When he was done he had a blond Woolly Mammoth. It seems that scientists have actually found some frozen Woolly Mammoths. So Danny went to the library and painstakingly researched their reddish hair color. He then went to Jones Paint and Glass store and went through paint chips, and mixed and matched and came up with 5 gallons of latex paint. The reddish brown latex was sprayed on from many different angles, and Dan completed the job by painting the Woolly Mammoth's tusks and toenails the color research had indicated.

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Dan assembling Stegosaurus castings in his shop.



The Woolly Mammoth in its prime.

Dinosaurs from Page 1. Dan advises "That the mammoth needs a little work again since the birds find his hair very attractive and I am constantly finding nests made of the material, everywhere."

Dan supervises and plants all the flowers in the gardens. About January or February he contacts Basin and Split Mountain Nurseries and orders annuals and perennials. Using seasonal, community service, and incarcerated assistants he plants the flowers in the middle of May in selected locations where they won't freeze.

Nearing the back door, I asked Dan about security. He said that "the most trouble they have is with people jumping the fence to look at the dinosaurs and tripping the security beams. At one time some kids jumped the fence and stole some dinosaurs and hauled them off. Other times it may be tourists who jump the fence and walk through the garden. And there has been a time or two when they have not checked well enough and locked people in. There never has been a break in of the museum proper."

Arthur Nord, who used to work in Vernal with the Forest Service, was an active member of the Lions Club. At the end of the World War II he said tourism was going to become very important to Utah, and Vernal had a wonderful opportunity as a gateway to the state on Highway 40. He thought that Vernal should have a museum.

The Untermanns were already in Vernal. Billy was a Ruppel and was raised down in Island Park. Ernie had come to Vernal with his dad, Garhart Ernest Untermann Sr., to look at the Dyer Mine and see if it was a possible prospect for iron ore. Ernie told Sue Ann that he came down Brush Creek and saw Billy, who was visiting, swinging on a fence gate. He was quite intrigued with her and hung around until she grew up and married her. They both attended the University of California at Berkeley and obtained degrees in geology, she a masters. They returned to Vernal where she became the first woman

Naturalist at Dinosaur National Monument. She and Ernie mapped the monument geologically, and relatively few changes have been made in maps at the monument since that time.

Arthur Nord saw them as a real potential for setting up a museum. So together they dreamed it up, designed the building to be a museum, and it was built to be the Utah Field House of Natural History. State funds were allocated in 1946 and the Field House was dedicated in 1948. Ernie was the Director and Billy was the Staff Scientist where they remained until the late 60s. The back door of the museum enters into what used to be an old janitorial closet and catch all. Danny is redoing the space into a fossil preparation area. The room has been cleaned out, holes have been patched and the walls were painted on State Park Revival Day, May 16th. As part of the 50th anniversary celebration Dan has in-

stalled a viewing window and built a counter where the public, at times, will be able to interact and touch and feel certain specimens. The artifact prep room will be staffed by volunteers and committed Docents who the museum will train. The room will serve two purposes; one, as educational, and two, a way to prepare fossils.

The cost for the room renovation has been minimal. Lumber was salvaged and reused where possible and purchases have been small. Dan says "There are a couple of reasons for not spending very much. First when the Field House is remodeled the room will be gutted, and second, the museum does not have very much money because of budget constraints. There is a misconception that since the Field House is a state facility, that there is all kinds of money available. This is not the case. The Field House and Gardens have had an average visitation in the last 10 years of 130,000, with revenues in 1996 of \$150,000. They operate on a budget of around \$230,000-\$250,000. The 1996-1997 budget was \$238,000. This has to cover salaries, operation of the building, heat, lights, air conditioning, mower repair, vacuums, paint, activities, etc., etc. So they have to be very careful of what they spend and how they do things."

Danny graduated from Uintah High School in 1983 and worked for Ponderosa in the Oil Field that summer and winter. He left Ponderosa in January of 1984 for a two year Church Mission in Oklahoma. On return he worked at Western Auto, cleaned at the old Country Club, stuffed papers at Nickel Ads, cleaned the Vernal Swimming Pool, worked at a Dude Ranch in Jackson Hole, and worked at Simper Sawmill. During this time he met Lindi here in Vernal and they were married on November 20, 1987. In the fall of 1987 he went to school at Utah Valley State College and took a course in cabinet making. He moved back to Vernal and got a job hauling firewood out of the Book Cliffs, and then in 1988, he went back to work for Ponderosa. By this time Dan was >>

>> pretty tired of job hopping and, with a growing family, wanted the perks of a real job.

At Ponderosa Dan worked on a roustabout crew building fence, lining pits, hooking up tank batteries, cleaning up oil spills, running pipe lines etc. He didn't mind the work, and would go back if he had to. But it was 8-18 hours a day, 6-7 days a week, and he was newly married with a little baby and he felt that he needed more time with his family. Although the oil fields had helped him considerably, he wanted to do something different and then one day a thought crossed his mind, and he wondered what it would be like to work in a museum.

The next day Dan came down and talked to Cliff Wardle who told him that the seasonal, Evan Hall, had fallen and had broken his back. Since Evan would not be back for awhile, he told Dan that he would start him as soon as he was available. Dan went to work and did general maintenance, including mowing lawns, fixing sprinklers, electrical, janitorial, and a little bit of everything. He must have made an impression because he was invited to come back as a seasonal the next year. Dan says "We had to starve through the winter and I worked for ranchers and did odd jobs to make ends meet."

The next spring Dan reported to work at the museum and was somewhat encouraged because Cliff Wardle, the man whose job Dan has now, told him again that he was going to retire. He had told Dan this the first year and that Dan would have a good chance of getting his job. Fall came again and Cliff did

not retire. Dan's seasonal job was nearing it's end, when Dan's brother in law called him from Haines, Oregon and told him that he needed someone to work on his 1,500 acre ranch there. Dan did not have anything else lined up, so he and Lindi talked it over, and they, with their new little baby, moved to Oregon.

Dan worked on the ranch for about a year, and even though the job was a good one, he kept thinking about the museum. It was getting close to fall and one day Dan decided to check. He called and talked to Cliff who told him that he was turning in his retirement papers that very day. So he started to inquire as to what it would take to get the job and found that he had to take a General Aptitude Test at Job Service. He could not take this test in Oregon so he had to drive to Vernal. He passed the test, turned in his application at the museum and drove the 670 miles back to Haines. The museum called him for an interview, so he drove back to Vernal and had the interview. In about an hour he was notified that he had the job. It was the middle of October 1991.

Dan was not too excited about the wage, but it was a full time job with benefits and other things he did not have, so he gave his notice in Oregon, he and Lindi packed up and moved back to Vernal. Dan had started his seasonal job in the spring of 1988 and was now on permanently.

One of Dan's interview questions had been whether he could put together a big pile of cast bones on the floor in a corner of the main hall. Dan answered yes, without hesitation. Dan's first job assignment including general maintenance, was to assemble the Diplodocus which now resides in that hall. So right away his job began to turn from general maintenance to doing other things such as exhibits, restoration and painting work on the fiberglass models in the garden.

He started on the Diplodocus and this project took him a couple of years to complete since it had to be dovetailed into everything else that was going on, including the general maintenance. He first built a scale model of the hall and the dinosaur to see if the dinosaur would fit in the hall among the security beams, entrance counters and still provide wheel chair access etc.. The room is 21 feet wide and 57 feet long. The dinosaur is 90 feet long so it was quite a challenge to make it fit. He worked with Alden Hamlin (former Park Manager) and Sue Ann to come up with a lifelike posture. Dan started by laying out all the vertebrae on the floor to check the placement. The Diplodocus castings are made out of a substance called WEP or water extended polyester. Dan calls it a bionic plaster because it is stronger than plaster, somewhat lighter, and is resin based. Some of the Diplodocus castings had metal pipe in them, but most did not. So Dan went to True Value Hardware and bought some Termite Bits, drilled each bone as necessary and installed metal pipes so the whole thing could be welded together. He then basically erected the dinosaur in place, except for the larger pieces which he put together in his shop. He completed the back from the hips to the shoulder blades and then fabricated a cart to carry this large piece inside. He made a host and used it to raise the section up so that he could install the legs. He then proceeded out towards the neck and tail in 4-6 foot sections at a time, so **Page 4 >>**



Little Suzy Bellew painting Dinosaurs on the walls of the new artifact preparation room.

Dinosaurs from Page 3. that the structure would not become out of balance. The whole Diplodocus is constructed so that it can be taken apart if needed and is self supporting with only one cable on the tail to allow it to be pulled up out of reach. Mike says " You can go to Denver, or the Smithsonian in Washington which both have copies of the Diplodocus, but they are not set up as well as ours, primarily thanks to Danny. Comparing the three, I think this is the best."

On completion of the Diplodocus, Danny created his present position. He was considered by the state to be a maintenance person. Alden, Sue Ann, LuRae and Danny sat down and worked out what his job description should be, so that Dan could get compensation for the work he was actually doing over and above that of janitor. Soon an opportunity came up with the state to change his job description. Dan went to Salt Lake City and had interviews with the people in the Division of Parks and Recreation. Subsequently, he received a letter from the state saying, that yes he was doing more than just vacuuming, cleaning, and mowing lawns, so they gave him his present title and a substantial increase in salary. Both he and Lindi were very excited.

J. Leroy Kay (Av Kay's brother), the Curator of Paleontology at the Carnegie Museum, in Pittsburgh, PA, was also involved in getting the museum built. In the 1950s after the museum building was finished, J. Leroy Kay made arrangements to furnish many of the existing fossils from the Carnegie. He also arranged for the Carnegie to furnish a set of molds of a Diplodocus which were made from the original bones of a Diplodocus in the Carnegie. Grant Merrell, who worked at the museum, drove back to the Carnegie in a truck and returned with the molds which had been made around the turn of the century when Andrew Carnegie was still alive. They were in pretty bad shape, so Grant spent one whole winter repairing the heavy plaster molds. Then two years were spent in casting the Diplodocus bones out of cement. It was then constructed on the lawn southwest of the field house.

The Diplodocus stood on the lawn for many years and over a period of time, began to show signs of wear. It was beginning to deteriorate quite badly and soon would have to be replaced. Somewhere along the line, as the story goes, the molds received from the Carnegie had been shipped to a school down south and never arrived. So they were lost, therefore the museum had no molds to make new castings. It was decided to contact Jim Madsen, former Utah State Paleontologist. Jim owns the Dino Labs Company in Salt Lake City which specializes in making molds of fossils or castings. Jim proposed making new molds of the museum's existing Diplodocus. So the Diplodocus was taken down. The old castings were taken to Salt Lake City and repaired, and molded, and new castings made. Then the new castings were sent to the museum, and that is how the Diplodocus that Danny put together was acquired.

New Diplodocus castings when purchased cost

approximately \$30,000. It costs another \$60,000 to have them assembled and that is the reason the castings were still in the corner of the main hall when Dan was interviewed. Shortly after Dan was hired, the museum sent Dan to Salt Lake City to spend a day at Dino Labs with Jim and the people who had made the castings.

Part of the deal with Dino Labs was that the company would give the museum new castings of the Diplodocus but the company would keep the molds. Dino Labs could sell other casts, with restrictions on where they were sold, but pay the museum a fee for every casting they sold. The fees returned to the museum allowed them to acquire a Stegosaurus.

The Stegosaurus bones or castings reside in Dan's shop. He has been working on their assembly for several years and hopes to have it completed this summer. The Diplodocus was easy but for a time he was having difficulty with the Stegosaurus. Things were just not quite proper. As he was putting together the backbone and shoulder blades, he just could not seem to make the legs fit. Dan says "I am not a paleontologist, and I do not have extensive training in that area, but something just wasn't correct. Sue Ann gave me some books and I read extensively on articulated dinosaurs, which are dinosaurs which have been found in the position that they died. The books gave a description of each bone and the shape it was in. It's like a foreign language, and I read it real slow, and sometimes drew it out. I determined that the bones on the front legs had been switched and that they were not marked correctly. So I switched them and they went together." Sue Ann says "Vertebrae paleontology is based on comparative anatomy. Dan has a very good perspective and is able to look at the bones and see how they go together. He is enough of a hunter and has butchered enough meat that he knows what those bones look like. So instead of taking a class on comparative anatomy he has learned about it from field dressing deer. And this is similar to what >>



The "Doc" in her den.

>> paleontologists have done all along."

Sue Ann thought that Dan needed to see the New Discoveries in the Denver museum and how they were put together and that sort of thing. Money wasn't available through the museum so she arranged lodging and paid the gasoline costs for the trip. Evan Hall, now a volunteer who helps Sue Ann with displays etc., went with Danny. Sue Ann set up a meeting with Ken Carpenter who is one of the curators of the Denver museum. Ken's experience includes working on a Stegosaurus that was found at Canyon City, Colorado and remounting one that was previously on exhibit in the Denver museum. While at Denver, Evan took many pictures of the displayed Stegosaurus and Dan confirmed that his rearrangement of the bones on the Stegosaurus he was assembling was correct.

Quite a few years ago there was a group of people out across the river from the Monument looking for dinosaur bones. One of the group, Donna Mc Kowen sat down on a rock to rest. She was scraping in the dirt around the rock and found a bone. The party looked at it and started digging down and around an articulated Stegosaurus which may be the oldest found yet. Sue Ann says "It is similar to the one unearthed at Canyon City and is significant because of the placement of its plates. It looks like half a beef with no head. It is very hard to find a completely articulated dinosaur. It is like finding a deer carcass, you very seldom find all of it."

The Stegosaurus laid in the area, partially dug, for about ten years. The museum got it plastered about the time Dan came on the scene. He, Alden, and Sue Ann went to the site and built a wooden frame work beneath the fossil while it was still on a sandstone pedestal. During the process of preparation for movement, Dan used expanding foam to cushion the fossil on the frame work. The BLM donated the time and machinery and built a road down into the site with a Cat. They were able to get a truck into the area and loaded the frame work with fossil. They then had to pull the truck back up and out with the tractor. The plaster encased Stegosaurus is now located in the fossil prep room that Dan is remodeling and will be one of the first items prepared.

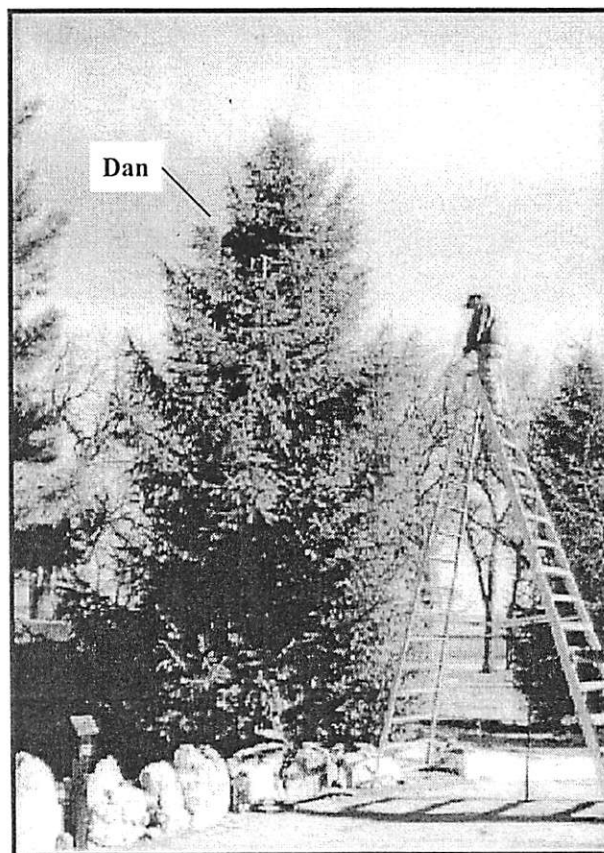
Dan does many different things. Yesterday he was repairing a lawn mower, the day before working on the Stegosaurus, or he might have been painting a room or a dinosaur, or building a display or taking down Christmas lights on main street.

The Christmas Lights have become a real challenge for Dan, because of tree size, the equipment he has available, the time required and not knowing who will be there to help and their capabilities. The normal maintenance position in the State Park System does not require supervisory skills. However Danny at times is responsible for 6-10 people during the Christmas Tree light installation season. He starts hitting the jail up in September for help, and there are days that he will have no less than ten Incarcerated Assistants, or Community Service people, or others working in the garden. They consist of a great variety of people with different personalities and varying degrees of ability. And they may be an entirely different group than the day before. So he is constantly training people to put up Christmas Tree Lights, to clean restrooms or whatever needs to be done. Normally he has one

prisoner a day plus a seasonal staff member from April through October. When the staff member is on duty, Dan turns all the mowing and watering over to him and he makes sure that it is getting done.

Installation of lights in the Garden is difficult enough, but then there are 63 trees on Main Street between the 7/11 Restaurant and the Bowling Alley. Dan says that "I'm not in charge of the Christmas Lights on Main Street, it's just something I'm kind of involved in. The Youth City Council at the High School put them up last fall." Because of fertilizer and water the trees have really flourished and some just simply can not be reached because of their height, so they get help from UP & L. The company donates a lift truck and Randy Deets, an employee, donates his time.

The lights have a rough time due to weather, but those on main street especially so because of delivery trucks, etc. Dan says "that he is not involved with the big downtown tree but, it's lights and all others are kept at the museum and repaired and maintained." Danny, the "Mighty Replicator", as Mike calls him, has done some sculpting and casting. Dan is involved with the Chamber's Dinosaur Gardens Committee and as a money raising project for the museum, he sculpted an Allosaurus skull. He did it free hand from a picture with all the articulated parts, and then taught his incarcerated assistants how to cast it. These were sold in the museum gift shop quite successfully. Dan says "Because of a rather tricky casting, the learning curve and the lack of time, this project has been put on hold. Danny comes from a large family, five **Page 6 >>**



Dan and assistant lighting one of the small trees.

Dinosaurs from Page 5. sisters and one brother, all younger. All are in Vernal except for a sister in Oregon and one in Salt Lake. I have not met the other siblings, but I wonder if they have Dan's natural talents. LuRae told me that "Danny is our hero. He is one of the most generous and talented persons that I have ever met or worked with. He is an artist, carpenter, mechanic, he is the person who keeps this place functioning physically." She says she "Has known Danny since he was a



LuRae in the museum gift shop.

little kid, and the family always had a milk cow, horses, and dogs about. Danny would spend every minute he could afford in the mountains. He enjoyed sneaking up on a bull elk with his bow and arrow and harvesting it and enjoying the meat. He also has the ability to understand the anatomy of the animals in our mountains. A few years back, Danny's mother built an old fashioned horse drawn bob sleigh. She pretty much did it all herself, and there is nothing she can't do. She's as good as any man in any creative situation, and Danny has grown up with her gifts. He can sit down and sketch anything. He has built his own home from scratch, and makes cabinets out of packing crates. He has the ability to look at something and fix it, and one of his greatest gifts is good common sense." Dan enjoys working with animals and has mounted several of the displays in the Natural History Hall. Susan Bellew who was recently hired as a seasonal to help with the exhibits, says "Danny recently taught one of the Docent courses on the

Natural History Hall. He was very good and very outgoing, and explained the different wildlife that live here and their habitat quite well." Danny says "Dinosaurs are my job, animals are my hobby. I have been interested in animals since I was small and I always had chickens, ducks, and a skunk around."

Danny has recently been enrolled at USU and is starting in Wildlife Management. He will take his courses in Vernal and Roosevelt so that he won't have to leave the basin. His goal is to become a Field Conservation Officer for the Utah Division of Wildlife Resources. Dan says "Goals are not easy and they have always overwhelmed me. It has not been until recently that I have understood a little bit more about how to handle them. It's just like my house, I kept the goal in sight and picked at it a little at a time, and pretty soon it was done. And I will bet that pretty soon, we will have a brand new fish cop on the beat. Move over Terry. ⚡



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