

## Black Hills National Forest: Heritage Resource Program

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Transcript

I'm going to talk today about the Heritage Program on the Forest and some of the different things we do in the Heritage Resource Program. Heritage Resources are the sites, artifacts, photographs, journals, buildings, and all those things that tell us about past lives in the Black Hills or on our National Forest. There are three aspects to what we do.

Probably the largest one is what we call "compliance." The laws direct us to go out in advance of the development of timber sales and other projects and survey the areas for archeological or historic sites. We find those sites and we evaluate their significance. If they are significant, they can tell us a great deal about past history or if they are a place where important people were or important events occurred. Then, we can place those sites on the National Register. Many of the sites we find on the forest have traces of information about past life ways, but they may be fairly small and the information may be fairly routine. We record that information and we release some of those smaller sites from management. We have ten archeologists working on our ranger districts. We have a large heritage program – probably the largest in Region 2 – due to our large timber program and some of our other large programs. We have recorded about 6,500 sites – those are sites that are 50 years old and older. They can go back to 8 - 10,000 years. We have a very busy program.

The second thing we engage in is tribal consultation. The laws direct us to consult with the tribes about management on the National Forest and also require us to consult about the sites that we find and this is a very rewarding aspect of the job – we learn a great deal. As Donovan mentioned in his talk previously, this is our opportunity to learn about the non-material aspect of the sites that we find.

Finally (and the thing I am going to concentrate on most today), is heritage resource management. How do we manage those things that we find? Many we should just avoid, but

what are some of the positive benefits that we are trying to produce from those (long-term)? So, we'll talk a little bit about that.

A little bit on tribal consultation with regard to archeological sites... We try to have two large inter-tribal meetings per year. We also do a number of field trips through the year, particularly in the summer when we find sites like this one several years ago. We think they are fairly unique. We invite the elders to come and talk to us about what might make these special places. One of the most rewarding things in my time here are some of the elders pictured here that I've had the opportunity to work with. They have been good guides in teaching us about their cultural history. The gentleman in the center with his arm raised is Oliver Red Cloud, a descendent of Chief Red Cloud. I know on that day he is talking to us about the 1868 Treaty. I like this picture of Oliver because he is a real proponent for keeping that history in our face and in the forefront. About six to eight months ago there was a picture of Oliver. He was down in White Plain, Nebraska protesting liquor sales. Oliver has diabetes and he's lost his legs, and they had a photo of him in front of the liquor store and he still had his cane which he liked to shake. I admire him a great deal and have a lot of respect for him.

One of the things we have tried to do the last seven years is a Tribal Youth Training and Employment Program in the Forest, and I just wanted to cover that a little bit. It's part of our work with the tribes to develop a working relationship. For the last seven years, we've brought Lakota youth ages 16-18 to the Black Hills National Forest. We house them at Bear Butte Lodge for two months, they receive an hourly wage, and we train them in resource management projects. We have done a variety of different kinds of projects. We do this as a cost-share partnership with the tribes. Our four partners have been the Rosebud Sioux Tribe, Cheyenne River Sioux Tribe, Standing Rock, and Yankton Sioux Tribe. This coming summer will be our eighth summer and we've brought Pine Ridge into our program. They put in funding for the salaries of the kids and we provide the funding for vehicles, food, and lodging, and it is about a 50/50 split. We get one of the Park Service units to purchase about two weeks of our program and their funds go into our program.

They have done a lot of fencing, trail maintenance, and trail construction. A lot of the learning that goes on in this program is learning about getting up at eight in the morning, having a sack lunch packed, getting in the cars, and going to work. I have a lot of admiration for these kids because they come from the reservation communities and for some of them this will be their first time away from home. They have to live in quarters with strangers and they have to learn how to work as a team. It takes a lot of courage for these kids to come here for two months and work. Obviously, the benefit for the Forest is we get resource work done that a lot of times we don't have the man power to do. A lot of the trail maintenance and fence building is for resource protection. It's a real valuable service to us.

Last year they worked for Gerard Baker at Mt. Rushmore and here they are after finishing their work for a group photo. We try to go on Saturday field trips and we go all around the Black Hills. We go to places like Jewel Cave, Reptile Gardens (they are real gracious and let us come in for a tour), etc. So we try to do some educational trips as well as the work. Every December at the Lakota Invitational (this is from 2002) we always do an awards ceremony at half-time at one of the games. We think that recognition of success is a big thing for these kids, so we get a half-time spot and we do recognition and awards in front of their families. It's a very rewarding program for everybody involved. Over the last seven years we have had 128 Lakota youth in our program. They have contributed almost 19,000 hours of labor to the Black Hills National Forest and the National Park Service. The relationship that we have built with people is "priceless," to use an old commercial adage.

What I would like to talk about for the rest of my time is our Heritage Resource Management Program. What do we do with these 6,500 sites that we have recorded on the Black Hills? What we try to do in our program is several things. We try to do a lot of public outreach. Every year we host a conference called the Island in the Plains Conference. This last Saturday we just had our 15<sup>th</sup> annual conference in Spearfish. We get in attendance about 75-100 people and that includes professionals, students, amateur archeologists, teachers, and members of the community. We are trying to share what we know about the Black Hills in terms of archeology and history with members of the community. We do public education programs – we are in the schools quite a bit. We also try to support and do archeological research.

The research on these archeological sites is very important to us. As a practical matter, if we are going to go out in front of a timber sale and find something, how do we determine that it is significant? Should we avoid it, or how do we determine if it isn't very significant and should just release it and not worry about it? It's the research that gives you the foundation. What is the importance of these places and these things? What are the questions we would still like to answer? We do some historic restoration of some old cabins – we'll have a few pictures of that. Our "biggy" and my "biggy" is public involvement, and so when we try to do these projects there is always a volunteer component. We want people to work with us on this. It's your resource -- we are just managers.

A few examples of some of the projects we're working on... This is Mount Roosevelt up above Deadwood. It's on Forest Service property. We placed this tower on the National Register in December of 2005 and it was constructed in 1918 by Seth Bullock. He built it in memory of his best friend, Teddy Roosevelt. The Black Hills Pioneers were the ones who helped fund this. They did a dedication ceremony on July 4, 1918 and the keynote speaker at that dedication was Governor Norbeck. Here's the tower today and we've started trying to find funds to do an engineering study and do stabilization of this site. The city of Deadwood has given us a grant to initiate that and we're trying to match those funds to see if we can stabilize -- the base is starting to crack. We want to stabilize and interpret this site in perpetuity and it's going to be about Seth Bullock, the early Forest Service, Teddy Roosevelt, and a real theme of western people who had a conservation ethic and wanted to make sure that that happened. We are going to be putting up two interpretive sites about the tower this summer talking about Seth Bullock and Teddy Roosevelt. There will be a second sign that goes into some of the detail – who built the tower, how it was built, and a little bit of background. Those two signs should be up this summer. The whole idea is that we have these unique and special places and we want people to know about them.

Some of the other projects we are doing... Donovin mentioned petroglyphs, and this is a photograph of the southern hills and there is a concentration of petroglyphs down here. They are sacred to the Lakota tribes and they are used in the spring for ceremony. As an archeologist they

are important to us because these petroglyphs cover all the different styles that you can find on the northwest plains and they are all down in here. So we've been doing a project to record the petroglyphs and monitor them each year. We use volunteers and it's been a fun project. This project has been done by the Hell Canyon Ranger District (Mike Lloyd's district) and his archeologists. We always get a research specialist to help us with these projects and for this one it is Dr. Linea Sundstrom, who is a renowned specialist on petroglyph sites. The volunteers go and they find the different petroglyphs and they record them. One of the fun parts about this is that we've had photographers, painters, and people who work in different mediums come and try to record these things in different ways. That young man has been on our volunteer projects and he is from Spearfish. He's been on our projects for about ten years now and he found a site with pottery, which is fairly rare. You can find pottery from time to time.

A different kind of a project... We talked about historic restoration before. This is on the Mystic District (Bob Thompson's District) and this is Juanita Garcia's project. The Gorman Cabin is over by Silver City and it was built by Tom Gorman. He and his...I believe it was his cousin, came down in 1876 to strike it rich, built the cabin there, started a mine called the Diana Mine, found some gold, and were well on their way to being wealthy, influential citizens. John had a friend who said, "You know, I will take that first ore sample to Denver for you -- be glad to," and he never saw his friend again. We thought this was a good story to tell: the founders of Silver City. So Juanita, again, enlisted the aid of volunteers. We have a program called "Passport in Time" and volunteers can come to a variety of projects on the forest, and we found that for these historic cabin restoration projects there's a group of volunteers out there nationally that love to do historic restoration, so they show up, they've got a van or a trailer, they've got their tools -- they are ready to go. The purpose here was to take this old log cabin -- John Gorman's old cabin -- apart, remove the rotting logs, replace the logs that were completely rotted, put a new roof on it, and then put some interpretation there. Here the volunteers are skinning out the logs... Here's one of our volunteer shots standing on a platform -- the new floor.

We've done three of these projects now on the forest. Two that Juanita's done -- Gorman Cabin (and some interpretation about early mining) and the second one is the Curran Cabin, which if you know where the Custer Crossing Road is up north, it's on the west end of the Custer

Crossing Road. Again, a mining claim. The third one that they've just completed is the Miller Ranch which is up in Reynold's Prairie, and we are going to do some interpretation up there about early ranching and the Miller family. There's the completed cabin with the interpretive sign out front.

A goal, I suppose, is to find some of these old structures – there's not very many left on the forest – and find the ones like this one where we have a photograph of who actually built it and the story, and tell that story, whether it's about mining, the livestock industry, or some other historic aspect of the Black Hills. There's our Gorman Cabin sign. It's just at the west edge of Silver City and you take Gorman Gulch north. There's the cabin.

The last project I want to talk about is an actual archeological research project. This one is on the Bearlodge Ranger District (Steve Kozel's District). For this archeological research project we had four partners... Our research specialist was the University of Wyoming – Dr. Charles Reher out of the University of Wyoming, and his graduate students. We got funding from the Crook County Resource Advisory Committee to conduct a large part of this excavation. If we wouldn't have had the RAC support, we wouldn't have been able to do this. So, we really wanted community support and they just did a fabulous job of giving us funding and support. [The last two partners are] our Passport in Time volunteers and the Black Hills National Forest. Well, why were we doing excavation at this site? One is that there were some adverse effects occurring – we were having some erosion, we were having some problems with road maintenance, some livestock impacts, some dispersed recreation impacts, and the site was sort of slipping away from us. So, we had a couple of different choices: We could try to just block this off in perpetuity, but we thought this was a great opportunity to learn about prehistory of the Black Hills, so we wanted to do active research and then move on.

Public involvement and finally, education. We'll talk a little about the education projects at the end of the show. Williams Spring sits up above Spring Creek. It sits at an elevation of about 5300 feet and it's a prehistoric campsite. Why we were attracted to doing work here is because some of the projectile points that we found (the style points) told us that people may have been here for 7/8,000 years, so we thought this was a good opportunity to look at a site which had

been occupied over and over again over time and might let us look at how people changed over time or how they lived differently over time. So, it was a really unique opportunity.

Again, this is a Passport in Time project. If you're interested in checking the project out, just Google for "Passport in Time Projects" and you'll go right into our national website. You fill out an application, they send it to a project director, we call the volunteers, and they come out and work with us. Here's our group of volunteers, and every morning is class time and you learn how to do scientific excavation. Probably the thing I want to stress here is the thing that we're after is information – information about where things are found. As you know, we don't like people to pick stuff up off the forest and card them off. In fact, it's illegal. But, the reason is because we lose the locational information. That's how we put the puzzle back together. Here everybody's learning how to do excavation. The first year, we put a backhoe trench through the meadow and we had a geologist come in – a specialist from Wyoming - that was able to reconstruct the site over time and the different episodes of soil being deposited and what the streams were like. We took pollen samples. We also started excavating little 1x1 meter units to start finding artifacts. So what we were trying to find out was, "how deep does the site go?" It goes very deep – at least nine feet... And also how wide the site is – how big?

This is the kid's pit. When we do pit projects, I invite families to come, and we have found that the young kids are very meticulous about doing excavation. When we first started this, a couple of the parents were concerned. They said, "Well, what if the kids get bored?" I said, "I'll take them fishing." What turned out was that once the kids found something, they were locked in the pit for the day and it was the parents that got bored. So, they love doing this and they do good work for us. In fact, on this session when new adult volunteers would come who had never dug before, we would say, "you have to go to the kid's pit and they'll teach you how to do this." The two boys there have about six to eight years between them: young Mr. Binder from Spearfish and the kid in the cap is a McKee. They are measuring stuff in place. This is an 8,000 year old spear point that the two boys excavated, found in place, mapped - three-dimensionally depth, east and west coordinates. One of the cool things we found that first year was what we call a flint-knapping station. When you are making stone tools, you take a piece of rock and you start striking pieces off to make your tool. What we have here is a spot where a flint-knapper was

sitting and knapping flakes off to make a spear or a knife. This is really cool because a lot of times – I mean, you can almost reach out and touch where this person was sitting, and if you're a flint-knapper, you know you would be sitting there cross-legged and shooting these flakes off and so you can almost reach out and touch them, so that's pretty neat. All those little, yellow, quart-size flakes came off of a big piece and he was probably making a knife. Based on the depth, this was probably about 5,000 years ago.

So we did that testing, and so what you would want to do is come back a second year and open up one block and just take one block down. We selected a location out in the middle of the site. The artifact density in the center of the site here is about 2,000 artifacts per square meter, so this is an incredibly dense campsite. So we set up a grid system and there is sort of this whole imaginary grid over the entire site. And here the volunteers have found some artifacts. Right there they are measuring depth below surface, and then they will have the east to west coordinates. The whole idea for us is that we know that there are probably ten, twelve, fourteen different camping episodes here over time. By measuring below surface and the coordinates, you can start to create this map that shows the different camping episodes and the different levels – it's like a layered cake.

The best part is the volunteers. The gentleman on the right, Art - he will be back with us next summer. This is his fifty-first volunteer pit project. He and his wife go all over the world and do this. I always tell people that they better bring roofers/kneepads with them. You spend a lot of time on your knees. Maybe in the picture you can see little toothpicks sticking up out of the dirt and those are marking individual artifacts as we excavate down. I think that in this session we excavated eight square meters, 24 square feet, and about 6,000 artifacts mapped in place. Then, the University of Wyoming graduate students will take all this data and they'll put it into a computer, and they can create three-dimensional maps of the different layers based on artifact density, so that's kind of what we are after.

If you come to visit, I'll put you to work. These kids came for a tour – this is the YCC crew from the Bearlodge District. They are screening the dirt that we had taken from the excavation and they are looking for the small sharpening flakes or hopefully a trade bead or something like

that. Then we took two of the units and we water-screened the dirt from those through fine 16-inch mesh and we were looking for the very smallest artifacts. On warm days this is what everybody wanted to do instead of digging, and on cold days I got to do it... We had two crews in 2004. The first 10-day session was what we called the "family group." We had a lot of youngsters and a lot of parents and kids and the University of Wyoming students and they were wonderful – very good workers. The second session was the "veterans" – this was the older gang. I would guess that the average years of experience here would be about six or eight years. Some of them have been at it forever, so...retirees were great. They would say, "What do your forms look like? What's your methodology?" and then put them to work and off they go.

Some things we found in 2004...at about the 5,000-year level, we found the remains of an eroded fire pit, and a big thing for archeologists is to find charcoal and fire pits. You can date the charcoal using carbon dating and then by association you know how old the artifacts are on that level, so that's a big one for us and we got charcoal and dated that at about 5,000 years. We didn't get a lot of bone – only two or three pieces. This is a toe from a bison, and we got two or three pieces of bone from probably deer or possibly pronghorn. I should say that before we started to do this excavation, we consulted with the state preservation office and we consulted a lot with the tribes. I went to them with our proposal and what we wanted to accomplish and we developed an agreement document that two of the tribes signed on. One piece of the agreement, of course, is what would happen if we would find human remains, because that can happen sometimes. So we talked about a protocol if that would happen -- we would back off and call the elders, we'd get together, and we would do the right thing – and I'm very sensitive to that. We want to learn about prehistory, but as an archeologist (at least in my training) I'm not interested in displaying anybody in a museum, so we wanted to be very specific and clear about that. And, of course, we try to find the artifacts in place. This is a spear point – I have a better picture of it. This is about an 8,000 year old point. So this pushed the age of our site back about 1,000 years. That's the end of our excavation in 2004, but we didn't finish the block. There were so many artifacts and so we came back in 2005 to finish the excavation. In 2004 we found some pretty neat stuff. We found one piece of obsidian. We've got about four pieces of obsidian from the site – it's a volcanic glass and you can analyze the structure of obsidian and you can determine exactly what source it comes from. We know the closest source for the Black Hills is

Yellowstone. Donovan was talking about trade earlier, and you see obsidian in the Black Hills, so you see extensive trade networks. We found several pieces of Knife River Flint, and the closest quarry for that is up in North Dakota, so again you have evidence of people moving and trade routes. The Lovell Constricted spear point that I just showed you in the ground usually comes from the high mountains – usually it comes from the Bighorns and the Wind Rivers. So there's evidence of a lot of people moving back and forth through the Black Hills. Today it's a crossroads, and probably for 8/10,000 years it has been a crossroads as well.

We came back in 2005 to finish the block. This is a dart point that is about 5,000 years old and it was found in place. One of the laws of archeology is that you don't find the cool thing until the last hour of the last day, and it's usually the proverbial bison skull coming out of the wall of the block. That happened to us in 2005. Mary Krietzler had just uncovered a fire pit pretty deep. We thought we were maybe through the cultural material. What she is pointing to right here is a broken spear point which she found right next to the fire pit. It was made out of red quartzite and this is the base of it, so the tip is broken off. It's about a 9,000 year old spear point, so we were pretty excited about that. We sent the charcoal in from the fire pit and that also dates about 9,000 years. We had a good living floor there from big game hunters from about 9,000 years ago. We finished as much as we could in 2005. We at least got down below that 9,000 year old point. We back-filled and receded, and left a few metal spikes embedded in the ground below the surface so that we could come back if we wanted to, find our grid system again and open up if we wanted to. There's our 2005 crew. Again, people from all over the place – all walks of life. That may be the best part of this whole thing – the people that you meet and get to work with.

I'll show you some of the points and artifacts that we found. These are two broken spear points, or the bases of spear points. They are about 9,000 years old. The one that Mary found and the one on the right is the one found previously – it is made of Knife River flint. So, 9,000 years ago this was carried in or traded in from North Dakota. People at this time were hunting really big game – bison, but of a different species than we have now -- probably a third larger than modern bison. These people were very mobile, and why we think that is because you can find an identical style point made just the same as these in the Oklahoma Panhandle, Texas, and

Saskatchewan. So you get the idea that people and their ideas are moving back and forth and they are following big game herds. It's a wetter and cooler period – the site was very wet at this time. The stream channel that is under the middle of this site was flowing with great volume – so very wet. These are also big game hunter type of points that we found at the site. This is the Lovell Constricted, Jimmy Allen, and Pryor Stemmed. One of the neat things about this site is that you can find every kind of point from the northwest plains in this site – nothing new or different, but everything that you can find is here, and that's really interesting to us. Some are high-altitude kind of points that you would normally find in high altitude kind of sites, and like the Jimmy Allen, this is a central plains or Wyoming basin kind of a point. Again, following big game herds... They are really focusing on the bison. Two broken points – the kids' points – are about 8,000 years old. Most of the points that we found at this site are broken, so what you are seeing are people probably coming back to camp, they have a broken point, they take it off, they pitch it, and they put a new point on while they are sitting at camp. Now we are just going through a time sequence. People say, "Well, how do you know that this point style is only 5-7,000 years old. How do you know that?" Well, it's because archeologists have found these kinds of points with charcoal, dated the charcoal, and you may have 250 or 300 dates from the northwest plains and all those dates are in a bracket between 5-7,000 years old. These are being used with atlatl throwing sticks which have been converted from spears to the atlatl throwing stick at this point. You hold the stick and you've got a shorter dart that you can launch from it. The other interesting thing is that at this time the climate changes dramatically, and you get what a lot of people call the "3000-year Dustbowl." It becomes drier, hotter, and if you look at soil deposition through the plains you'll see a lot of wind-blown soil being deposited. [It was a] very harsh climate. The question for us is: was the Black Hills radically affected like the basins were, or is this a refuge? Is this a place where people can come to and kind of get out of that basin environment for a while? The other thing you find is that point styles become very localized. I was talking earlier about early big game hunters and their points you can find everywhere. Now if you look across the plains, the point styles are very particular to an area, so we think the climate is harsh and we think that people are hunkering down into territories now. We have got some oxbow points in the site and those are interesting to us – you don't see them a lot in the Black Hills. If you go to the north, you find big bison kill sites with these oxbow points in them. If you go in the south and Oklahoma, you find these, but you look at the sites and people are

finding small game, medium-sized game, a little bit of big game – it's kind of a general life style. We were just curious as to who these folks were. Interesting points... About 3-5,000 years ago you get these indented base points. They're still using the atlatl. These people are kind of down in territories. You find all these point styles in the same sites – together. The thing that is curious to us is: are there three or four different flint-knapping styles? Is it three or four different bands that get together every once in a while? We don't know, but it's curious that you find all these different point styles in what we call McKean sites. If you go down to the Wyoming basins, they have now uncovered and excavated about 25 pit houses with these points in them. They used to say, "Oh pit houses only occur in Arizona and Mexico, they don't occur up here on the plains. So now you have 25 of these well-documented, excavated pit houses with these points. So we're curious – what are these folks doing in the Black Hills? Probably on a hunting trip. Then we move along in time. People start moving around again quite a bit. They are still using the atlatl. People don't know much about the atlatl, but really that was the weapon of choice for about 5/6,000 years. This one has probably been fire-treated before it was flint-knapped. This one has a knife edge put on it. The one on the far end was probably broken, and instead of pitching the base, they re-sharpened it so you've got this little stubby point, but they wanted to reuse the material. Well all those points I have showed you up to now have come from the plains – no big deal. Then we get these things that are kind of odd – they have serrated edges. You don't see these on the plains. You do see them in the eastern woodland. So I figure we've got our first evidence of summer tourists coming out to the Black Hills – tourist industry. They were probably coming out to do a fall bison hunt and then go back to their villages to harvest their crops after the bison hunt. The points that I was most excited about aren't the oldest ones – it's these. These are called Besant points. Still using the atlatl. Why I am excited about these is because if you go out further west, you will find Besant points in large communal bison kill sites. They aren't just the jumps. What people were doing out in the basins were actually building wood corrals with wood drivelines and running these bison into these corrals and then killing them in the corrals. Over in the Green River basin there are two of these that have been really well excavated. The sophistication of the hunters here is just outstanding – and also their flint-knapping technology. Some of the early big game hunters had just beautiful flint-knapping technology and that level of artistic ability goes away and suddenly it springs up again, and you've got people making these long, beautiful spear points – just very thin. The one on the

right is Knife River flint. So these people are moving and there's trade routes just going on. If you go east river you can also find Besant points, but you find them in villages where people don't move very much and they are growing crops and they have pottery. So our question is, "What are they doing in the Black Hills? Are these the bison hunters or are these people from the eastern villages that have come out for the summer hunt?" I think that these are really fantastic. About 11,000 years ago you get conversion to bow and arrow and you get all different kinds of arrow points. What I just went through really fast in about 15 minutes was 8,000 years of people living in the Black Hills.

Just a few last pictures and then I will entertain questions. I just wanted to emphasize the volunteers and this is sort of a family deal. We have couples and families come out – we encourage that. It's a lot of fun. There's a father and daughter from Washington State, Art and Mary from Wisconsin, a retired couple from Lovell, Wyoming, and Miles and I. Every morning you have class – there's always an educational piece to this. I know Dr. Reher is doing a flint-knapping demonstration this morning on that particular slide. The last couple of field seasons it always turned out that we would be in the field during the Fourth of July weekend – that's just when we could do it. So we always have a big potluck. Everybody who volunteers usually brings a camper, a tent, or an RV and we just have field camp. It's a lot of fun. I kept talking about atlatl. This is the great atlatl world championship at Williams Spring and all the graduate students are lining up with their throwing stick and their arrows and they are eager because Dr. Reher and I have been talking trash all week and so we have to have our shoot off at the end. There's our Fourth of July fireworks at our atlatl throwing. It's really weird, but I found that all the best sites are in places where I have no radio coverage – nobody can get a hold of me. I don't know why that is. It's a phenomenon!

Through three field seasons, not counting Dr. Reher and the University, 47 volunteers from the community and about 2,500 volunteer hours of labor [have gone into doing this]. We wanted to do some educational products out of this, and that was part of our plan with the Crook County Resource Advisory Committee who funded this. We wanted to get something into the schools as a result of this. Several things: we put together some dig boxes – boxes you can set up in the classroom with artifacts and you can teach the young kids how to excavate and map stuff. We

put together an archeology activity trunk that targets forth through seventh grade and has a series of archeology activities in it that you can do. So the teacher can check the trunk out, take it, the lesson plans are in there, and you can take your class through one of these activities. It was a curriculum that was tested in Utah for about five years, so we've adapted it to the Black Hills. Finally (for Crook County to begin with, but anybody else that is interested), we're putting together a mobile interpretive display on Williams Spring and that's going to the printer next week. We have a collapsible board that you can take down and put up and then put the pictures and panels up on. Finally, we have a website that you can visit about Williams Spring and if you go to the Passport in Time website, they will have a link for past projects. Click on that and Williams Spring will be right there and you can look at our whole project. Here's a picture of our dig box. It is 1x1 meter. We put artifacts in. I even have some antelope, deer, and bison bone that I have put in. We have four of those trunks. You can set it up in the classroom. We have found a place that recycles plastic lawn chairs and grinds the plastic up, so that's our dirt – recycled plastic. We have lesson plans for the teachers and a carrying case - this whole thing collapses down, you put it together with bolts, and you can collapse the whole thing and put it in this carrying case. Eagle Scouts in Rapid City built the boxes for me and then did the design for the carrying case. It was an Eagle Scout project. So we have got those things available and people can check them out from us or they can check them out from the Crook County Museum if they want to bring them into the classroom or if you have a youth group that you would like to do some education with.

### **Question & Answer Session**

1. You said that particular sophisticated equipment had disappeared and then came back. Do you think that the people moved out and then came back, or was the art just lost for a while?

It could be either. To be quite honest, just looking at the material culture it's hard to know because either of those could be true – either of them. I think that when you get to the bow and arrow, the weaponry becomes so sophisticated that you don't have to worry about the aerodynamics of the stone points anymore, as you did with the spears. I think that there could be a practical reason for not paying as much attention to the knapping.

2. Besides the Sioux and Cheyenne, what are some other tribes with a sacred connection to Bear Butte?

A number of them. We also consult with about 17 tribes on a regular basis – probably the same list. Kiowa, Kiowa-Apache were up here – a lot of tribes... Mandan came down to hunt and they have origin stories about Bear Butte as well. The Shoshone – particularly for a short period of time they were some of the first folks to acquire horses and were sitting perfectly on the west slope of the Rockies after the Pueblo Revolt and were able to get horses. They came sweeping across the plains and for a short period of time were up in this area. Northern Cheyenne – you mentioned them. Yes, I would say that those are the three that stick out very quickly. We talked to the northern Arapaho a lot – they have stories about this place or closely associated with the northern Cheyenne. There was a question earlier before we took a break that dealt with identifying sacred places. When we consult with the tribes, we ask about that information and when we evaluate significance of a site, most of the time we are talking about research potential, but there is a criteria for traditional cultural properties, so we are always asking for information about those kinds of sites that would be key to a culture and their knowledge and their understanding. So we have some of those in the Black Hills and it's not something we can learn about, but we depend on people to tell us about.

3. Is there specific information available to the public that shows where sacred sites are located? Will this information be used when dealing with travel management?

The answer is, no – we don't share the locational information. It's a protection measure because people like to pot artifacts. It's pure and simple. So, the purpose of our program where we enlist volunteers (and we actually invite people to come for visits) is that we can get people to sites and we can experience those. But yeah, we don't disclose that. As far as travel management, yes – that's one of the screenings that we'll do. We have everything in an electronic database and we have locational information. It tells us whether a site has been evaluated as significant or not. There are criteria that we apply. You have to demonstrate that yes, you could learn something from research – you can't just make something up. And I would say – I would guess – that

probably 20% of our sites would be significant – some of them historic, many of them prehistoric, and some of them because we've gotten information and we know their traditional cultural properties.

4. How many sites are there?

[There are] 6,500 that we have recorded. And I would say that we have had a good survey on about 45% of the forest, so a little less than a half a million acres. There's high site density in this area, which doesn't surprise me.

5. There are probably many unknown sites by Missouri River Trench, which is too bad. It is a major dilemma in land management.

Yup, and it is a resource that is non-renewable. When that 8,000 year old site goes, it is gone. You don't grow new ones. You try to think about those sites and you try to think long term.

6. What is the proper procedure if one finds a possible site?

Depending on the land ownership... If it is private land, it's private. Let's just dispel with that right away. But on federal, you would contact whatever agency is manager, let them know the location, and they can go record whatever information need to be recorded.