

Name: David Klein
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Interviewer: Karen Brewster

Brief Summary of Interview: In this interview, the focus is on environmental philosophy where Mr. Klein gives examples of various impacts of the environment through people's attitudes and actions and who has inspired some of his views. He shares several stories from when he was younger, talks about the early settlers, the Boer War, and several other topics that played a role in his views of environmental philosophy.

KAREN BREWSTER: Today is November 8, 2014 and this is Karen Brewster with Dave Klein, starting over again. A couple of days ago when we tried this, the power went off on us and we lost that part of the recording. So we'll start again sort of talking about what we've dubbed environmental philosophy, but I'm not sure that's the right term. But how people interact with their environment and the importance of conservation and preservation and wilderness. If we get that far.

DAVID KLEIN: Yeah, that -- It's a good thing to start out because it's -- environmental philosophy can mean different things to different people. I was fascinated when I was -- early, I guess in my college development, undergraduate student. And that part of it you meet -- you get turned on in your cultural relationships when you're in elementary school, especially when I lived in Vermont. Everybody you -- the teachers and the students and the other people you might meet, and you didn't meet very many of them, because you were small and it was during the Depression years, there was not a lot of socializing where meals were involved. But they all -- It was Vermont people. We understood that most of the people in Vermont were farmers, but they weren't all because there were some small cities and towns and our dad was a jack of all trades. And he was trained back in New York, where he was born, with a little bit of that. Focus was on engineering. And so, he was a very broad person and he was a very intelligent guy and went through high school and became -- At that era, too, the emphasis was on the young nation of the United States that was becoming a real nation in the world. And the impression of young people was it's all we're bringing, all this modern knowledge from Europe. Engineering, particularly knowledge. How could you build these fabulous bridges across rivers? It's one thing to build big churches and stuff, but bridges where you had to support vehicles going across and they couldn't all be like the Roman aqueducts that were made out of stone without mortar. Steel was becoming important for construction and for bridges, yeah, that was it. And it was just fascinating to an engineer to -- And if you had good math and you knew how to angle some structures and then you could calculate the loading, depending upon the design and the materials. Well, that's what's done in modern architectural design for homes, as well. Well, in the early days it was, too, but you're limited when you didn't have reinforced concrete, for example. And so then you realize some of those churches that built without any reinforced concrete and they'd -- these, what do they call them, standing buttresses outside to hold the --

KAREN BREWSTER: Oh, the flying buttresses?

DAVID KLEIN: Flying buttresses that would hold the stone work. And even in an earthquake it would keep it from falling down, in or out.

KAREN BREWSTER: But, so when you were a kid in Vermont, did that start influencing this environmental philosophy?

DAVID KLEIN: No, no, I wasn't, definitely not. I grew up close to nature there and loved nature. And part of it was, you know, the grandfather had a farm with a lot of natural hardwoods and had a sugar bush and apple orchard. And it was an altered, human altered, environment, but it was very rustic and he had -- When he was -- When I knew him, he didn't have a vehicle, he had horses and a wagon. And he -- he was sort of at the end of the road that had -- he had about two miles to go to the closest little larger village, which wasn't very big, where there was a milk processing dairy and he sold his milk there. When he first went there, I think they would come and pick up the milk. And after he milked, and he had to cool it, and he had a spring that ran through his basement, and then you could pump water up in the sink. So it was pretty lucky and it was just beautiful water and cool and they could cool the milk down in -- put the milk can down in the basement in the pool to cool it right away, which you should do. And then you put the milk can out by the end of -- in front of the house, close to the road, and the milk wagon or truck would come by, tank truck, and pick it up or maybe just break up the cans and take it back to the dairy, and then they could pasteurize it. Although in the early days it was -- pasteurization was just coming into realization, so there was -- laws hadn't been passed yet to require pasteurization. They had just been passed, I think, when I was a few years old. Of course, most mothers breast fed the babies, but if for some reason they couldn't, then they always heated the milk up first, hot enough to literally pasteurize it, then cooled it down and stayed warm but -- so that it was safe for the newborn, whereas a lot of adults and kids drank unpasteurized milk.

KAREN BREWSTER: Just raw milk. So back to, you don't use the word environmental philosophy, what does that term mean to you?

DAVID KLEIN: Well, it's a very loose term that -- You mentioned it before that it includes a lot of things. It -- to me, it's -- As a generic term it means the patterns of curiosity of how people lived with the environment in a reasonably compatible way. I mean, I wouldn't call -- you use a standard of the extreme poverty and ghettos and pollution as -- it's a standard that you can say that it's part of environmental philosophy, that's what you try to -- you want to avoid in a culture or society. But on the other hand, when we're a developing young country and there was a big focus on industrialization and machinery and all kinds of energy, and steam engines, of course first, there was little concern about, say, air pollution. And little concern about pollution of waters. The assumption was, well, you didn't have water treatment plants and so you just use the rivers. The rivers were important for energy production, they were dammed in places, and in the early days, yeah, there was still fishing in them. But finally the pollution and early

progressive people in -- politicians and governors and mayors would work for trying to keep these rivers clean so that they could be -- So you could use the water in the river if you didn't have other drinking water available or you wanted to fish in there, too. And you didn't want to lose that, and you wanted your city to be attractive and a safe place, not where diseases were present and easy to -- And for example, when -- I recall as a child when we had a flood in the Connecticut River Valley because of excessive rain apparently and maybe snow melt-off, I don't recall the details. But then when flooding occurred, of course, it floods the ghetto areas where people are living without adequate sanitation. And even then they were probably using outhouses, which wasn't too bad when there were few people, but when you get flooding, you have all that human feces going into the river. And the worst of the environment, including agricultural farms and what, all going into the river. And then it often affected the water in reservoirs and stuff that were maybe using the river water, or were close to them and using the river water for storing and holding it up high so it would flow down by gravity to the cities. Well, then it was, yeah, it was a good reason to reduce the pollution, but there was a tendency also to - - like in other parts of the world, India, for example, where the rivers are the source of water and the source of disposing human waste and everything. And so you -- There, the solution is, if it's a big river and there's enough flow, it's not that serious, or at the edge of the sea, you figure, well, the sea will take care of it. Which, of course, it will if there's not that many people living in a given place. So it's how we humans in different parts of the world, in different cultures, use the environment. And then, of course, it's vastly different if you live in a hot area versus a cold area. Like in the northern communities, vastly different if you have abundance of water year-round and you don't have to preserve water for irrigation, and you don't have to be careful about the water that it can get polluted because you've got excess, unless let it go out to sea and then it's diluted and it's not a problem. And in fact, you can argue that going out to sea, it's eventually fertilizing the sea as well as funguses, which is true, of course.

KAREN BREWSTER: So that Connecticut River Valley flood you mentioned, did there end up being cholera or -- ?

DAVID KLEIN: Diphtheria was the -- There was an outbreak of diphtheria and they had a -- you could be -- They had a drug you could get a shot. And the big thing was for everybody. And we were living in Hartford, a city, and so in order to get the shots they wanted everybody to go to the bridge that went across the Connecticut River in Hartford. There's this one big stone bridge on pillars. And the reason they wanted you there is because they could still use that bridge and they could treat people on both sides of the river and they didn't have to go around. And you couldn't get around in other places because of flooding. So they -- It wasn't mandatory, but it was highly recommended. So, yeah, my dad was working, and so my mom took us kids and we walked quite a bit a ways to get there because transportation wasn't very good over the flood. But we were able to walk on high ground and didn't have to go through water areas, and then we all got the shots. And, of course, for us kids, we didn't like the idea of getting shots, but my mom and dad both emphasized the importance. That this is very serious, it could be worse and many people are going to die. It's not just -- you may not get the disease and you don't have it now. If you don't get the shots you may not get it, but if you do, then

you help to spread it around to other people. So it's not just for yourselves, it's for the whole community. And so they were good about explaining these things. And they also -- There were debates, of course, because there were the Christian Scientists who didn't believe in these shots, and they were fairly strong there in New England at that time. And so I think they probably -- it was some Christian Scientists were convinced that, yeah, they should make an exception because this is a really exceptional situation.

KAREN BREWSTER: So was there a massive outbreak or did the vaccinations help prevent it?

DAVID KLEIN: Oh, you can't draw that other conclusion one way or another. But there was a pretty good turnout of people and it was felt, by the government that it -- There was not a massive outbreak. But there might not have been a massive outbreak.

KAREN BREWSTER: We don't know that, that's true.

DAVID KLEIN: So yeah. So, at any rate --

KAREN BREWSTER: Anyway, I just want to follow up on that, so back to the environmental philosophy.

DAVID KLEIN: Okay. But this is kind of, you know, it's how people live with the environment. And that means, you know, what is difference in -- that's part of my fascination in different cultures. And you had these different cultures in the United States, but they were usually regional and you didn't travel into many of these other areas like the south versus the north. And there were more diseases and some of them were health-related and food-related in the United States, which you started to learn about those in New England schools, which would tell you about them. And you learn a little bit about, you know, some of these problems that were just the way people were used to living and they didn't want to change. Like, what is it, the para -- or something that -- a parasite that you get from the ground by going barefoot all the time.

KAREN BREWSTER: Oh.

DAVID KLEIN: And it's common in places -- it's not common where you have hard winters. It's common in the south. And then there was -- when I got into undergraduate work in college, and, yeah, then I learned about -- begin to learn about food-related problems and diseases such as the problem of eating white corn in the south, or grits, instead of yellow corn. Yellow corn had a vitamin that the white corn didn't have. And so the simple solution was to eat yellow corn. So parts of the south where they normally used yellow corn and made, well, it was grits, you know, they made it, ground it up and you'd make cornmeal was important. So, you know, to get people to change is really hard if it's traditional. And the white corn grew well, so does the yellow corn. But you realize -- when I did get to traveling, you realize that more and more about food is very culturally related. Like when we first went to -- with the kids to -- when I went to do the PhD work in Vancouver, Canada, where we'd been -- My wife had relatives in Seattle

and we'd -- to get to there you'd go through Seattle to get to Vancouver where I would spend the academic year there with the family. And, yeah, there were some minor differences. And, you know, why were these differences? Well, some were that there's more influence of the -- well, the British in the first place in Vancouver. But then there was some spillover from the prairies where there were a lot of Europeans from the eastern countries like Poland and Czechoslovakia and some of those places. Whereas in the eastern part of Canada it wasn't French speaking, it was more similar British influence like in New England. And then, of course, you have the French and French Canadians and they were -- French Canadians went to school in Connecticut in the city in Hartford, when we moved down there and my brother and I were in elementary school and a big public school. And the neighborhood we had to walk through to get home was French Canadian and they had their own church schools, Catholics, parochial schools. And realized, you know, these are different people. And they still in their homes were speaking French, but it wasn't the same as they spoke it in France. And then realized, well even New England, which you think is British influence. Well, northern Aroostook County in Maine where they grow a lot of baking potatoes, you know, the big potatoes like they grow in Idaho, the northern part of that that's French-speaking. And I didn't know that at first. And you learn about the places that you're used to living in. And then the same was true in northern New York, north of Lake Champlain, and northern Vermont, yeah, some of those communities are primarily French Canadian-speaking.

KAREN BREWSTER: So you're saying how culture influences people's relationship to their environment?

DAVID KLEIN: Yeah. People adapt to the environment and the environment adapts to the people in terms of how they use it. So, for example, if you go into Europe say, but it's true in the United States only in space so differently in the United States with the prairies and the western grazing lands, for example. Well, you knew that there was no way you could have the tremendous numbers of bison when the western movement moved out and the colonists started occupying that area. And it was the Natives where you thought that it had been that way forever that the Natives with horses were excellent riding bareback and they hunted these bison with horses. At that stage, American history didn't put enough emphasis on the fact that those horses were introduced by the Spaniards. Well, we like to think of ourselves English as the colonists, the first colonists. Well, it was the exploiters' countries rather than the colonizing countries and that was the Spaniards and the French in the north coming in with the voyageurs to get furs. They got along -- In the north, they got along and they were dependent upon the Native people. And in the south, the Spaniards were out to -- mainly after gold and precious metals and precious stones. Initial exploitation. And it was sanctioned by the church, initially. Whereas in the north, it was -- the threat to the colonies were that the French were working with the Native people and they were joined up -- the Natives joined up. They sometimes had wars and squabbles, but it was totally different. It wasn't over land usually. It was over how they harvested furs and things of that nature. And then when we had this western movement, it was -- Well, then there was Thomas Jefferson when he was President and started and organized the Lewis and Clark expedition to the west coast, that was to establish rights over -- like first claim. When this was European countries, that was like the general attitude was, the

Spaniards as well, that at first you just killed any of the Natives in Mexico and Central America that resisted their armies. And so you had to send a lot of Spaniards who were good warriors with horses, and they were able to overcome these well-developed cultures with high cultural development mainly because they wanted to get -- initially, get the wealth. And then it was later then that they decided to settle, because if they were going to have people there they had to put them to work in the fields. And then, of course, the church was having a rough time justifying looting countries and the money -- a lot of the money was coming back to the church. And there was -- people were being murdered and mistreated. And then the worst case, not intentionally, but the diseases were brought in by these people, and it was obvious that these whole cultures were being wiped out. Native people. And, of course, gradually the European, the common people with some education, realized that this is a terrible thing that's going on and let's soften it. Well, the way you soften it is in you convert these people to be Christians and then they were no longer savages and they would -- so we have to treat them more fairly. But then once you convert them, then they're equal to us and so then you try to do what's best for the country, not by the people. And you do -- And this is where Jefferson was ahead of his times, but at the same time, he thought of these Native people as separate countries or separate nations. And so his instructions to Lewis and Clark was: "No, we can't accomplish this objective." But the objective is important from our relationship to the European countries, mainly Spain and France that owned Louisiana. But it was mainly France in the north, that, yeah, they were still coming from -- threats from Canada because they were bringing in firearms to the Natives. Whereas the attitude in the south was don't trade firearms to the Native people. And you can use any other techniques like alcohol and what, and tobacco, which the -- The Spaniards learned and discovered tobacco and then they started growing it. And the Natives liked it, but they didn't use it in an addictive way, initially. It was a ceremonial thing. At any rate, so all of these cultural things, the way the environment shapes people, but it's the same as the evolution of organisms, especially mammals, say, and birds. That have the ability to move, but they go to habitats that are suitable for them to live in and so they get dispersed around. Sometimes the habitat that they -- type that they evolved in, no longer exists. So sometimes they had to adapt. But evolutionary adaptation is a slow process, and sometimes populations would be forced to speciate or adapt evolutionarily. It's like the finches on the Galapagos Islands that --

KAREN BREWSTER: With the way their beaks changed?

DAVID KLEIN: Yeah, in relationship to how they could exploit seeds and different food of different types so they wouldn't all be competing for the same thing. And so, you know, this, you know, Darwin enters the picture, and -- but he wasn't alone in having these difficult questions and how do you answer them. So environmental philosophy is tied to ecology, evolution, and adaptation to environment. And then this question that underlies all of this is where -- as humans as so called thinking animals, the term environmental philosophy is a human biased term.

KAREN BREWSTER: Right.

DAVID KLEIN: How do we, as humans, and people that are educated and use that term? Some of us who understand evolution and ecology, it's still a biased term because if we say environmental philosophy is orientated toward protection of the natural environment, then you have to ask, why protect the natural environment? Well, it really doesn't make any difference to humans or to the environment if humans aren't there as to how it's going to go. It's going to go in terms of what's a natural way. And that could mean rising sea levels after the glaciers were receding and people had to move out of good habitat for them for agriculture and what. And places like the British Isles become islands instead of connected to -- and this is all during human history now. And so we realize that humans have adapted to the environment, but they're also doing this as a group of people and groups of people. It takes a group of people living together in one area to create a culture or a culture develops in relationship to humans living that way. If they were just -- we were all nomadic and had no bounds, which could have been the case when the first humans were moving into Europe from Africa or into the Americas from Eurasia. How did it settle out? And then once you get modern and get civilization occurring and agriculture and domestication of animals, I mean, these were all people that were once hunters and gatherers and not used to being settled down in one location. But if you get land and producing agricultural crops, then you get the concept of land ownership or management of the land. If you destroy the land by overgrazing it or not fertilizing, and that happens in many areas. And so the areas that were naturally fertilized, like the Nile Valley, by flooding, I mean, you don't want to eliminate those floods. You learn to move out. And same is true of the people that lived in the lower Yukon and Kuskokwim Rivers. These people lived on the rivers, except they moved out before the snow melt and the rivers flooded into other areas where they -- They were semi-nomadic, so they would move out in the Yukon-Kuskokwim Delta. They'd hunt the waterfowl that were returning. They would trap furs. They would fish a little bit through the ice for things like pike and whitefish. But then they would also, when the -- after break-up and the rivers went down, they'd got back to their villages. And then when the salmon were running, they were -- they'd live on the rivers in relationship to harvesting salmon and preserving it. And they had to do all these things that were culturally related or stimulated by the environment, such as where do you put the dried salmon so bears are going to eat it, or the dogs if you're using dogs for traction. Yeah, and other smaller animals, wolverines. So you learned to build caches that bears can't get into, and you take the ladders down and you put -- you improvise with -- once you get stove pipes you use old stove piping to -- around so the squirrels then can't climb up the post or porcupines and things like that, that would climb up there and damage your facilities and your food.

KAREN BREWSTER: So what do you think has changed and why humans now, instead of responding to flooding by moving out, we want to control it?

DAVID KLEIN: Well, it's because once you localize and that partly started in the Middle East probably with agriculture and crops, then you can have -- you can produce more than you need. And then you can have communities where people trade, and you sell some of your crop to them and then gradually it reverses and if you get a -- You have to have someone to protect your land when you're a small community, because other people might move in and take it away from you. Well, that's when the kingdoms and

chiefdoms and the church were involved. So if they're going to have armies that protect your land, they're certainly justified in taxing you to pay for that. And maybe you pay it by so much of your crop, you contribute to the king and then they use that to sell and trade with other places what they can. And then -- but they're also feeding the armies and paying -- they have to pay the soldiers, etc., etc. and feed them. And so -- And then you have new developments, like some of those you can work yourself like in the Nile Valley. Well, initially, when they started settling there instead of being hunters and gatherers, then you -- yeah, you cut down the trees to -- and turn it into the cropland. But, what do you do in the dry season? You get water out of the river. And how do you get it there? You carried it in buckets. And so you had to know how to make buckets and things, initially. And you can do that in many ways. But then you can also maybe have water power. Or if you don't -- on a big river that's slow moving, you can't do that. Well, then you devise some pumping system, which you got a treadmill sort of. You -- and it picks up buckets of water and then with -- on cables and a wheel at the top, wheel at the bottom and a ladder and you climb up to there and you -- then you're walking -- your weight will carry it down. And so, you know, this could be -- slaves could do this. You know, so having labor instead of having engines. Well, you didn't have the engines, steam engines, or diesel pumps, or windmills. But the windmills came pretty early on, because if you have the wind, then you can pump water and, of course, in the early days of Holland when they started reclaiming land from the sea by building dikes, you've got to get rid of that water. And windmills were all over the place. And, you know, you have to be conscientious. You learn about engineering of building dikes to make them resistant and, of course, the worst thing you can have is things like muskrats that burrow into your dikes.

KAREN BREWSTER: It does seem like we as a society have shifted from living in accordance with what nature throws at us, to us manipulating and trying to change nature.

DAVID KLEIN: Well, yes and no. But, if you're living at a very low density, you're more -- you have to live closer to nature and you can harvest a lot of natural foods. That includes fish as well as food from the forest and land. The nuts and all the things that the early pioneering farmers used a lot of these supplemental foods. Shot the deer that were coming and eating the crops, but then they managed the crops right, they could minimize this but they could still shoot the deer if the deer were living in -- You left hedgerows with food in the hedgerows. And so learning how to live with the environment in such a way that you benefit from it. Humans benefit from it. It's sort of like, you know, in the early days, there was no commercial fertilization and farmers had horses and cattle and the value of those for recycling vegetative material and fertilization was huge if you were on a rangeland. Well, all of the farmers -- the cattle were out there, the rangeland replenished itself unless grazing was too intense. And the average farmer, dairy farmer back in New England, yeah, you accumulated all that cow shit all winter long and you put it out on the fields. And in Denmark, I mean, it was so impressive that they've been -- more than any other country in the world, have maintained per capita production of food products for export much more than other places without using great quantities of fertilizer. Dairy farms over there, big farms, they saved all of the urine and then they would put -- had big storage tanks, usually made out of stone or concrete. And then in the

springtime, after the snow melted before you plowed, you went out with these tank trucks, or wagons, and the motion would cause a sprinkler. You know, it'd dribble out and then something sprinkled it. This urine from the cows, which is much more fertilizer. They used the solid waste as well, and had wagons in the early days that had a rotating gear because you pulled it with horses and it scattered these feces, which, yeah, we use these kind of devices and they were quite adaptable to being pulled by tractors as soon as we got tractors. And, you know, Creamer's Field I remember they put that fertilizer out during the snow melt period and that was part of what the birds were coming into. They didn't bait -- bait -- but there were cows. Some of the grains go through whole and don't get digested and especially from horses, that happens a lot. And they pick it out. This was in New York City, they had so many pigeons before automobiles, pigeons and introduced English sparrows, and starlings. And they did a good job of helping to clean up the mainly horse shit there, because that was the main attraction before automobiles, and there were just horses everywhere. And some of the -- if they were kind of semi-farmers and had wagons, and they would -- some of them would actually, the horse stopped and it took a crap, they went back and picked it up. And if they didn't maybe someone else would, but the pigeons would also work on it in a hurry. But it was, there was so many, it could be a problem. A health problem, as well. And especially the more wealthy people said this is terrible, you know, to have so much smell of the horse shit. They've got to clean it up regularly.

KAREN BREWSTER: So then it became burning coal, and that polluted and now we burn fossil fuels and that pollutes.

DAVID KLEIN: Yeah. But even London, you know, they -- back in the early, previous century, in 1910 or so, the coal was the main source of energy for the city and for heating. And all these little buildings and apartments had a little coal stove.

KAREN BREWSTER: It was terribly polluting.

DAVID KLEIN: And it -- it wasn't so much that it was so terribly polluting as that in the wintertime the air is sort of like Fairbanks there where it would hang around, and if it had strong winds they wouldn't notice it. And other cities were doing the same thing but they were windy cities and didn't have a problem because of the mixing. And it was -- yeah, mixing is dilution and it works out fine up to a point until you start getting to the point that you're polluting the atmosphere globally and it's having an impact back on the weather and other factors. So, yeah, it's not like people should have -- we should have been doing things differently early on. Well, when you realize the advances in knowledge and education in England that was leading the world at the same time, and London was a hot spot, one of the hot spots, but leading the world in commerce and they were building better ships and everything. And the first industrialization was going on and, of course, coal was what was doing it.

KAREN BREWSTER: What do you think about now and living sustainably with the environment?

DAVID KLEIN: Pardon?

KAREN BREWSTER: About us now trying to live sustainably with our environment, what do you think about that?

DAVID KLEIN: Well, I have a problem with using that term “sustainability.” It’s sort of like ecology. When we started talking about ecology, it was sort of unique and people started thinking differently. But now it’s, you know, candy bars say “ecological” on it, and nobody has a clue as to what that means. And people, even in the universities, that they don’t -- now, sciences through a lot of universities, I think, and this includes UAF, ecology is not the core course in the sciences that it was before. And now what is more core is genetics and DNA so we can better understand plant and animal populations, history, etc. through genetics. Which is true, of course. We didn’t have the techniques for doing that. And it’s the same in England. Once the health problem of burning coal became overwhelming, and so finally they said, “We’ve got to do something.” So what did they -- mainly what they did then was they coked the coal outside of the city close to the mines, and then they brought the coke in with the railroad cars. And then they also could make natural gas out of the coal, and they did that. Back in New England, some of the cities like Boston and New York, yeah, they had these big gas -- this is the problem with that term gas that’s been used in different ways. But if you look in a dictionary definition, it’s a gaseous state of fuel, whereas gasoline is not the gaseous state. And it was like -- and even in Europe, they frequently use the term petrol because it refers more specifically. It’s a newer term.

KAREN BREWSTER: So sustainability, you have a problem with the term because it’s sort of overused and not understood?

DAVID KLEIN: That’s one problem. But the problem is, it’s not a simple problem, it’s a complex problem. For example, you go -- Well, you see in the News-Miner, they interview people and say, “What’s your opinion of something?”

KAREN BREWSTER: Oh yeah, those “man on the street.”

DAVID KLEIN: The “man on the street.” Well, some of those are college educated people, some of them are students, and this is good. I mean, I like to read those because you tend to forget, you know, that, yeah, we know that different political parties there, but we assume they’re all the same or similar. Well, it’s not that true. I mean, we have people coming in from Mexico and families and they’re gradually being acculturated to our culture here, which is very strange from -- And blacks the same way. It’s very strange. They can become just more like an educated white person than a lot of white people that don’t have good education or came from the south and never -- they don’t think you need an education and they don’t realize how important it is for the kids to get an education. And one of the big reasons for needing an education even if you’re not worried about over-population is that the change is occurring. And this is -- Chamber of Commerce wants growth, they want growth, it’s good for the economy. So there’s more workers and more consumers, good for the doctors giving birth to the kids in the

hospitals, good for the people that bury, funeral people. More people that die, yeah, they do better. And so you got to face the fact that people are living longer, but with more people they're all going to die and so it's a good secure business. And the economy goes bad, still people are dying and being born. They may slow down in an educated community in producing of young, a little bit, but not much. And then you have the cross-section of the people and you realize -- It's so strange, even I remember one of the scientists I had great respect for was -- worked for the Fish and Wildlife Service, I think. And he was really very well educated. He was a Mormon. And he rationalized -- We discussed sometimes the religions and he was very, you know, he understood and accepted evolution and all of that. And he'd think about problems, too. And his whole attitude was the same as in third world countries that, well, who's going to take care of older people and people are living longer and we're going to live longer, the moms and dads. And yet we haven't dealt with childhood diseases adequately because at that stage there were more problems with things like measles and stuff that would often lead to death of a child. And we've helped out in that. But their attitude was even though the average life span had increased markedly, this was back in the '60's and early '70's, and his statement was, "Well, let's face it, I mean, who's going to take care of us when the kids all grow up. And if they have good jobs, then okay. If we just have a couple of kids, then and they die." And his attitude was -- You know, he had four kids, I think. And he was planning on they were going to have another one because they didn't really believe -- the Mormons really didn't believe in birth control. And they believed in you make more Mormons by having more kids. And, yeah, that's a legitimate way to approach it. And it seems pretty justified in like some of the north African and Muslim areas where the leader has a harem and one man can be father to a hundred and some children. And they have the wealth to raise them well and educate them well, usually, too. And they don't have a lot of problems with the women fighting with one another, because they're all in there together. And they don't have much of a voice anyway.

KAREN BREWSTER: Right, they don't have any voice. Well, so, do you see any ways we can live -- get back to living more in accordance with the environment around us?

DAVID KLEIN: Of course, yeah. 'Cause we have some examples, but also common sense. But it's common sense means you have to understand the environment in which you live better than we normally do. I mean, like where's most of the food coming that's feeding us and versus other people in the world, as well. Well, we're -- now we -- concept of free trade is a good one but it's not in tune with the transportation costs. And it used to be, you know, we were able to make big advances in the days of sailing ships when it took a long time to bring bananas from the Central American countries into the U.S. market where they could be moved by train to the markets. And bananas lend themselves to that. You pick them when they're green and they'll go on ripening. And you have to handle them with care, you don't want them bruised. We can do all this and we did that. And we did it with a lot of other things, too, that could be shipped that way. And especially things like fibers and wool, for example. You know, some places like New Zealand at one time was so wealthy because they produced so much wool when it was so important for clothing. And so they could export it. And it didn't make a difference if it took two months to get to Europe or the United States or one week. No

point in having it come in a hurry, as long as it keeps coming. The same with other things like silk and linen and what. But when we get hooked on -- and, of course, whaling was there for oil. And a lot of that was for not so much for heating but for lighting in the cities. And what did they use in other parts of the older world? They used olive oil. But if they'd had whales they would have used them, but they didn't have them and they didn't have the ships and capabilities. And then in the early days of the U.S., before petroleum, yeah, we used a lot of wood. And we used that for energy sometimes. And we could drive steam engines with it and the early railroads used wood where it was available, like here when they had local mining railroads. That's why you see these old pictures and this land is totally clear-cut.

KAREN BREWSTER: This is all second growth.

DAVID KLEIN: And you see these huge stacks of wood. And for Fairbanks, that was a source of that. And, well, it made sense. We couldn't afford to have coal shipped in. Well, then when we got the railroad and the coal mine.

KAREN BREWSTER: Well, then we cut all the trees down, so we had to do something, right? Or not all the trees, but we cut down many trees.

DAVID KLEIN: No, but you've got to think, remember there was a boom with the gold mining that brought this about. But it was mining coal didn't make sense unless you had a way to get it to market. Well, with the railroad that was --

KAREN BREWSTER: Okay.

DAVID KLEIN: But we also -- we didn't have to -- We didn't use it that much for wood, moving wood around until -- Well, partly because we had these big coastal forests where there's a lot of wood and we could just cut that and the Japanese were happy to buy the logs until finally we made it illegal to buy unworked logs, and then they just took a slab off of each one of these. Still shipped these big logs that were squared. It was unbelievable.

KAREN BREWSTER: So where does the idea of wilderness come into all this?

DAVID KLEIN: Yeah, that's -- I was fascinated in this, and that is when I became interested in humans and cultures and history. In that, you know, in the Middle Ages and some of the artists were depicting the cultured landscape was the most beautiful. In the early U.S., too, the cultured landscape was the desired things, even though it was pretty colonial like the old covered bridges in New England and then scattered farms and still forests and fields. And if you moved westward, then there was more of the land area was suitable for agriculture, so the forest decreased unless it was not suitable. You know, hilly country and not suitable soils. But yeah, there was, for a long time the -- to me and I felt that way, too, a beautiful landscape and the same in Scandinavia was a cultured landscape. And going to Sweden particularly, which without humans it's virtually all forested, and the central and northern would all be conifers. But, of course, the lichens --

and early people cleared land and started growing. And so that how those people lived then, it was fascinating to me. Did you go to the -- when you were in Oslo, did you go to the old building museum, outdoor museum?

KAREN BREWSTER: Yes.

DAVID KLEIN: So at those places, and there's a terrific one in Stockholm and other cities and Copenhagen the same way, of how these early people lived and used resources differently. And that was before -- you know, when they had domestic animals and so they had, again the fertilization. But then they harvested all kinds of things. They harvested this scouring rush, *equisetum*, (*Equisetum hyemale*) that grows in marsh -- lake edges and marshes. They'd harvest that and that was used to feed animals. In Iceland, when I was there and hiking into the mountains studying the reindeer, the feral reindeer, and where sheeping was ranching up in the mountains where -- This was in the part of Iceland and it was related to studies of environmental impact of big dams. Well, some of this would flood some of the grazing areas for reindeer, and that's why I was there. But also there were sheep ranchers and some of that would flood 'em. But when you went in the mountains, you'd come across these old farmsteads up in the alpine habitat, alpine tundra. The only wood is willow that would grow along streams. And, of course, a very short growing season. These were the poorest people that tried to have a place of their own, whereas in the early days when the Vikings were there, they were -- well, they brought a lot of women captives from Ireland and they became additional wives for the -- The chieftains had big land holdings, because they got there early. And then they had -- they usually had -- the others that came were some of their families that came from Norway and they got -- The chieftain had all this land and then they had an army when these other people came in and they had to fight against others that were going for the land. So they all had -- if you were -- you didn't have the best land unless you're the chieftain and that might include a salmon stream.

KAREN BREWSTER: That would be the best.

DAVID KLEIN: Well, it did in some places where there was salmon. That was the value of your land and the farmstead and you had a big army to protect yourself. But it was sort of a semi-democratic society. But mainly they would meet once a year and people would come and it was like -- It was a flag of truce, you -- when you came there, you didn't bring warriors or weapons, though sometimes they would be tempted to do that. And they settled up mainly crimes, but also land and maybe if there was a central government, taxes. But a lot of the reason for going there was one chieftain had gotten into a dispute with the neighbor one and they'd had a squabble and there was a murder. And they -- there was no law out there and so there was kind of war like. So they would come and the family that had lost somebody through murder, and that instead of having wars, they would come there and they'd present this before the -- the sort of the assembly or legislature. The Alting was what it was called. And these were, you know, the powerful chieftains had representation there, but it was pretty democratic. And they brought families with them, and so they camped out and big caravans coming. And they never had any wars there. So then the worst-case scenario, somebody committed a murder, they

were exiled. And some of them went to Greenland. And that's what started -- they were exiled because there was some kind of war and it wasn't just a fair war, it was somebody murdered somebody else. And so they'd -- it was a pretty good system, actually, for the time. But you've got to realize this is true all over the world when there's first people coming. And so you've got all these issues that -- I mean, it's like there's no place like Alaska now. There's places that are similar like -- we're being treated like Nigeria where they have lots of oil but the oil companies are paying off the leaders and they're corrupt and that doesn't filter down to the people. And that's something what we just had in this last election. I mean, there's a good letter to the editor today that said in effect -- he was just a good observer, he says he never thought -- he's somebody that's lived here for quite a long time. Doesn't say what he did or what. And he says that he raised his family and a good voter, and he says he didn't realize that we'd ever come to this position. He knew there was corruption at times, but for openly the outside money to buy the election. He said, "This is no longer a democracy." And I agree.

KAREN BREWSTER: Well, yeah, the way the oil industry bought the election during the primaries, that initiative on the oil tax, that was clearly the oil industries bought that one.

DAVID KLEIN: Yeah, right.

KAREN BREWSTER: Well, back to sort of to this -- I keep coming back to this environmental philosophy. Trying to sort of triangulate what we mean by it and how to articulate it. And so I kind of start thinking about people like Aldo Leopold and --

DAVID KLEIN: Okay, but then we should have -- we still have ground to cover. But one of the things I should have mentioned is that here when I was -- joined the faculty, I had a lot of these questions in my own mind, and I had never taken a course in philosophy. Well when I went back and did a PhD, I took one in philosophy at the University of British Columbia. And, yeah, but when I was in wildlife unit and had a bunch of students, and when I started I wanted to have more discussion with students, graduate level students, about understanding the world we live in. And that includes harvest of wildlife resources, for example, but also sustainability like -- although I don't like the term, you know, managing resources in a responsible way so you don't destroy them. Renewable resources, the term, means you should be able to continue to use them. And, of course, the early history of -- not early history, the history before statehood was that -- and I was working in southeast Alaska at the time, was the salmon canneries were all Washington's and Oregon's state interests, and they were involved in salmon there. And they just, literally, under the State -- Territory, the Territory, it was legal to build these fish traps and control the harvest of the fish. They created jobs for people, and a lot of them were Native people but for people, not exclusively, to work in the canneries. Food job for women. And men could fish, but they couldn't fish with their own boats. I mean, they could but the canneries had control of these traps and they wouldn't -- you couldn't fish on the rivers.

KAREN BREWSTER: So overharvesting like that that happened is an example of not managing a resource in a renewable way?

DAVID KLEIN: No, that's more complex than that. And the hatcheries meant that the local people couldn't harvest and sell the stuff economically. They couldn't compete with the canneries. And the canneries then offered them jobs with the tenders and stuff so they could still do their boating and they may own the boats, but they worked for the canneries. But they couldn't -- it didn't pay to go out, invest in a seine net or a gill net and go out and catch and then market your fish. The only way you could do that is if you worked for the cannery and they wanted you to do that, because some that didn't get them all. But it wasn't so much over-exploitation of the resources, it was use of the resources by one interest only. And they did frequently take too many salmon on rivers and knock down the run, but they didn't -- it wasn't -- it was primarily this. And with statehood, then first thing the State legislature did was to make the canneries -- outlaw the canneries. This had a big impact on a lot of people and some of the -- A lot of the Native people at first, in some areas, it was the only income they had and they couldn't compete with the non-Natives. But in the canneries, that were close to the villages, the Natives they were getting money and they were benefiting economically from these canneries. And they didn't -- the men didn't have the fishing boats, but it was places like Petersburg where they had -- these were all Norwegian fishermen who came and settled and they felt, and so did a lot of others in other communities, that we who are Alaskans should be able to catch the salmon. So in other words, open to entry rather than closed and giving it -- selling it all to the canneries. So, I mean you sell it out to one company just like the oil industry, I mean, they're going to monopolize the whole thing. And, of course, there's been major changes in recent years because then the canneries -- That was really the only way you could market the fish was to can it, and then it could be shipped all over the Lower 48 or the world for that matter. And so in the choicest resort restaurants down in around Yellowstone, for example, look at the old menus, I mean, it was a big deal. And a lot of it was canned salmon, because they didn't have the refrigeration to get fresh salmon. Now it's a minority almost, the salmon canning.

KAREN BREWSTER: Yeah, well, you were starting to talk about wanting to have discussions with graduate students.

DAVID KLEIN: So I did. I organized this. First, I thought, well, we'll just have a discussion. And environmental philosophy in a biology/wildlife program is, you don't just start teaching it. Plus I was not a regular teacher. I was a federal employee and only expected to teach one graduate level course a year, which was fine. But I wanted to have something like a seminar, a non-credit discussion, which you have to be -- it takes time and students don't have too much time and it's at the graduate level because then maybe students would have time because they're writing theses that are -- they're starting to get interested, too, in these issues. And so then I tried to do a one- or two-credit course. And I figured it's a kind of philosophy, so I talked with Walt Benesch and Rudy Krejci. They were the two philosophers from the philosophy department. And Walt -- I liked Walt and I was one of the guys that was rocking the boat in terms of the faculty under Bill Wood, and Walt Benesch was one of them, so the two of us were kind of ring leaders, except

that I was the one that could speak out more because I wasn't under salary by the -- But Wood had other ideas. He could get me transferred by complaining as the president of the university. And he threatened that when I got involved in some of these issues. I was president of the -- I was elected president of the National Association of Academic Professors or something. It's a different title. But it was a national organization, and at that time, you know, a lot of the state run schools didn't have -- including those in the west and Alaska, there was no tenure, no sabbatical leaves, and you were on a contract for -- Here it was a two-year contract. That was like you could be a full professor and work your way up, and you're under a two-year contract and it was up to your dean to recommend whether you -- If he didn't like you when you got into a squabble, or she. Was he mostly then. And he could say, "No, we're going to put you on probation. One year probation. Unless you shape up, then you're out after one year." You couldn't just -- if you had been around under a two-year contract and were a professor, even an assistant or associate or full professor, they couldn't arbitrarily -- Well, they couldn't fire you arbitrarily, but they had to be more open on that. So at any rate, I was, you know, on the precursor to the faculty senate which was the -- because there was a growing unrest among the faculty. We wanted to have more of a voice in the governance of the university. Then we weren't thinking in terms of students having a voice, because the faculty didn't have a voice yet. So finally Wood consented to having a faculty council, which was like a sandbox that you could say -- it was like he would bring an issue to them to discuss and then we could make our recommendation to him. But -- Or if an issue came up, then we could discuss it unless it was one that he said, "No, it's already -- we have the authority." As a dean has authority over the department head and the department head over the faculty and then he has the final say himself. And that's what's the situation when Pruitt and Viereck were involved in that. And at any rate, Walt wanted to stick to his philosophy. He had a lot of training in eastern philosophy. And whereas Rudy Krejci, he had come from originally from Czechoslovakia, and he was more of a traditional, European philosophy. Old philosophy. Historical philosophy. And so, but both of them liked the idea, but the problem was they didn't have graduate students then. And so Rudy said, "Yeah, he'd -- " I asked him if he'd be willing to join me and offer a course at the graduate level or upper division and graduate level. And be like a discussion. And we would be responsible for some introductory talks but it would try to be more like the Platonic discussions where you want much involvement with the students. So we would -- our job would be, mine and Rudy's, would be to sort of introduce topics. We'd pick topics so that we could focus on something that was of interest, and one might be the ethics of trapping, for example. And well, yeah, you could do this at the University of Alaska for sure and there'll be interest. But we could talk about other things about that -- some of them related to the major conservation issues like say, Rampart Dam or something like that. But the focus -- both Rudy and I were to try to keep it on the philosophical basis rather than being branded as environmentalists or -- Well, we wanted to relate it to present issues. But I think birth control was one we did, but that was later when they were getting more female graduate students.

KAREN BREWSTER: That was one of the topics you discussed in the seminar, you mean?

DAVID KLEIN: Yeah. I usually would pick the topic and Rudy would go along with it. And sometimes then I relied on Rudy to show how philosophies dealt with this in the past, especially ancient like Greek and Roman. So he was a good authority and he's a good lecturer. I mean, when I was in high school I thought ancient history, I mean, I didn't have any interest whatsoever. But he was good. And I was brushing up, and I was doing some reading on my own in philosophy from the time I was in -- took a course there at UBC. And there were discussions groups there that I joined on. They were like evening discussion groups and non-credit things, because it was a bigger university and they were -- usually they didn't call it environmental philosophy, it's philosophical discussions. But it included the sciences. And there, there was one young scientist who actually started those groups, a young philosopher. And he was -- he wrote a book, a little pamphlet. It's one of those little ones. On something like rationality and religion or something like that. Well, this -- and there were obviously, you know, they taught -- they had a theology section in the college down at UBC. But this was not through them, it was in the biological and physical sciences. So then it was obvious because he had asked -- this guy would set up a panel and try to get someone from the biological sciences and someone from the physical sciences that pretty much accepted modern views on the cosmos and on -- But when it came to evolution it was obvious that it wasn't as wildly accepted by faculty members as you thought, and especially in the physical sciences. But there were good discussions and most of them -- I remember this one guy who was a physicist and he was top notch, but he was also pretty fundamentalist religious. And boy, he didn't do very well, but he was -- Well, it's impossible to discuss religion as a faith when science is not a faith. Scientific methodology is not a faith at all. And some people tend to show it as a science versus religion, versus religious faith. That doesn't make sense. Because the Bible has got a lot of information in it, but it's observational information of the time that it was written. But it's interpreted by people and written by people who are strong believers in Christianity, and the New Testament, at least. And then the published scientific findings, whether it's about the physical world or the biological world, it's there. It's subject to challenge if new information comes through, but this whole question of what's a theory about say, gravity, is it a theory or not? Well yeah, it is a theory, but it's also substantiated by experimentation. And so, it's the same way with -- I mean, I don't like this separating say traditional knowledge, Native knowledge. Traditional knowledge versus scientific knowledge, it doesn't make sense. Science is not a knowledge. Knowledge is knowledge. And it can be good, accepted knowledge, some of it is observational and some science methodology is observational. I mean, we can watch what's happening to the moon and gradually predict a lot of things that are happening up there. And it's true in the cosmos. And then you draw hypotheses and it proves out because the sun keeps coming up in the morning and going down at night, etc., etc. And traditional knowledge of Natives is sort of -- is mostly all observational knowledge, although probably were some experimental stuff, but not very much. And it wasn't written down as such. It's passed on. But it's -- knowledge is frequently -- traditional knowledge is frequently the best knowledge because it is observational, and the people were there close to what they were observing and not going out in the field and observing things for a week or two and then coming back. It was -- And traditional knowledge back when I was a boy, you know, some of these old-timers, farmers that had lived there and cleared some of the land. And yeah, that was traditional

knowledge but it was -- they had the advantage of melding it with modern -- especially when it comes to things like technology. And the same was true to a limited extent and to a greater extent now in indigenous knowledge, because those people were accepting new technology. I mean, that's what archaeology shows that the ability to produce when you only have a few things you can work with before you had metal. Depending on what kind of stones you had or could trade or get in some way or another. And these people developed skills that were culture-related and made -- like this micro blade technology was -- they were just chips of the really scarce flint, the best quality stuff, and obsidian. But mainly it was flint. You can make a flint point, but all these little chips then why not just use those? Unless they made for an arrow or a spear, but spears first. And they would make grooves in the wood and then take pitch and glue these chips in. Well, it was like they were sharper than razor blades. And the problem with stone points on a spear that you had to -- and an animal you had to be in close enough range that you could throw that spear and it still had velocity. It doesn't just hit and fall off.

KAREN BREWSTER: Right.

DAVID KLEIN: And how can you do that? Well, you have to have some way to propel it. Well, an atlatl was a good way in the sea. And especially you could be sitting in a kayak. And whereas if you're standing like you're throwing a javelin, you can throw things further, but the atlatl, you -- it's lateral and you don't -- it's easy to keep it the right height to go from your kayak to a marine mammal and you can get a big force. And you didn't have to kill it, all you had to do was get that thing in and the points were designed to stay in. Then -- And you had your spear. Frequently, and then you went closer and you threw a harpoon with a rope on it and then you had the thing. Even a big animal. Then you could make the kill etc. You had all the advantages. But in -- And then some of the interesting stuff archaeologically, is these snow patches that are melting there in mainly Yukon, a few in Alaska, but it's mostly in the Wrangells. So suddenly, here's all these caribou shit where there's no caribou in recent times when in the Yukon. And now there's so much information that has come out of that. And they find things like the spears and atlatls and then arrows from bow and arrow. And so they could date all this stuff because it was -- they could get accurate dates on the caribou poop, the wood. You know, you didn't know how many hundreds of years it was if it was wood in relationship to how they got it and how many -- how long it had been used. And it would have, you know, for fleshing arrows, it'd have feathers cut from what the people could get like swans or loons or other waterfowl, usually. And so you get -- and there's no decomposition. It was like it was in a freezer. Up to 7,000 years old was the oldest they found, and that was bison shit down in northern British Columbia. I don't think they found any human tools associated with that. But 5,000 was common. And then they'd find occasional leather moccasin or even a leather pouch, which they had some tools in or something. But they'd find a perfect spear from an atlatl that was thrown and then it went into the snow and you couldn't find it. And when you realize, you know, in the conditions and especially if you missed and you were in a group you don't go and recover that instantaneously because the animals might still be there and the others -- give the others a -- before they had bow and arrow. But then they could date all this stuff and

show just when the bow and arrow was coming in. And when it came in, it just spread so rapidly, it's amazing.

KAREN BREWSTER: So for environmental philosophy, do you have particular writers that inspired you? We've talked about Aldo Leopold in the past, but are there other ones who -- ?

DAVID KLEIN: Aldo Leopold was one of the major ones, because when I was taking undergraduate courses at the University of Connecticut, they had a good program in wildlife, which was in with the forestry department. And at the time, I decided I wasn't really -- I didn't want to be a forester because I was more interested in animals. But I was more interested in diversity of botany. But I took forestry courses and I never regretted it. And in fact, it gave me a feeling for soils. Forestry was more into soils than, than wildlife.

KAREN BREWSTER: So Aldo Leopold influenced you from a scientific perspective, right, but did he influence you philosophically, too?

DAVID KLEIN: I wouldn't say it. The problem is with wildlife management. He wrote this textbook when he was a -- right when he was a professor at the University of Wisconsin, called Game Management.

KAREN BREWSTER: Right.

DAVID KLEIN: And it was focusing on wildlife and how do you use the land along with using it for agriculture, mainly agriculture, but other uses, in a compatible way with having suitable habitat. And one of the things that I appreciated most about his writing, well, his way of writing and he was able to express himself both as a scientist and as a philosopher. And that was very impressive to me as a young student. And -- but also it was a heavy emphasis, too, on habitat that I appreciated. And I had -- and my undergraduate degree was in, I think it was called, in the Department of Plant Science, which included agriculture as well as forestry and wildlife. And I was interested in botany, and I took botany courses and for electives I took -- I was interested also in gardening and in the European gardening and the different kinds of the formal gardens versus the natural ones, or so called natural, and British. And so I took a course in horticulture, which put -- there at that university was a -- agriculture was a big and still is a big component of the university. And the horticulture was the combination of the plants that are used for landscaping and how the plants are used in landscaping. And that was fascinating to me because I was interested in the aesthetics of landscape architecture. And I was already starting to read some of the translated from the Japanese, their emphasis on gardens and using natural vegetation, but also manipulating it to put emphasis on, say water and aquatic plants, and then the shapes of some of the trees, you know, were, especially pines, were so important. And when I finally got to Japan and was able to visit some of those places, I mean, that's just -- it's such a beauty. And then some of their architecture, too, was -- the most beautiful stuff, for me, was residential homes, wealthy homes that people could live so close to nature and was, of course, it was a different

climate with sliding walls so they just kind of open out and you're part of the garden and it's part of nature. That living close to nature, and that's why I got focused early on on endemic architecture. When I came to Alaska, log cabins, you know, people built -- secure buildings were good for the cold weather, but they were made out of logs and they used sod roofs and they'd learned to do this all by hand. And then you realize, well, some of the old Russian buildings were made out of logs and better craftsmanship because they had a longer history of doing it, whereas Alaska, people coming for mining, coming from the states, it was new to them because they didn't -- their culture was not the Siberian culture where -- And, of course, the early Russians, you know, they used -- they didn't have much -- they tried to do most of the -- It was like post and beam in some ways. They used wooden pegs because metal was too expensive to get there.

KAREN BREWSTER: Too hard to get. Well, before we were on the recorder, you had mentioned the influence of particular activities and events on sort of your environmental thinking. And you had mentioned that field course in Russia and Finland.

DAVID KLEIN: Yeah. Another one was when I -- both in -- when I was on sabbatical in Norway, but even earlier, there was this Norwegian environmental philosopher, Arne Naess. You know about him? Well, that was a lucky coincidence in the timing of my being on sabbatical there. And the two sort of host professors that sponsored my being there and then I applied for a Fulbright and with their help got it. And but, they had both visited here, especially one of them. One of them was -- they were both ecologists.

KAREN BREWSTER: So one was Arne Naess?

DAVID KLEIN: No.

KAREN BREWSTER: No, oh, these are different people.

DAVID KLEIN: He was the professor heading up the philosophy -- He was the head of the philosophy department at the University of Oslo at the time.

KAREN BREWSTER: Okay.

DAVID KLEIN: At that time, he had several graduate students and this -- this is going to take time. Do you want to continue or not? Or do it next time?

KAREN BREWSTER: I'm thinking maybe we should do it next time.

DAVID KLEIN: Yeah, because this is an important one. And it led to some of my writing over there, and then interaction with Arne Naess and his students, especially a couple of his grad students which were -- who were -- They saw him as a real mentor and a -- but he was also an environmental activist.

KAREN BREWSTER: Yes. Okay, well, why don't we then start off next time?

DAVID KLEIN: Yeah, let's do that.

KAREN BREWSTER: But I just wanted you to say a little bit more on that Russian/Finland field course and how that influenced -- or do you want to do that next time?

DAVID KLEIN: Yeah, this precedes that.

KAREN BREWSTER: Okay, so you'll do all that next time?

DAVID KLEIN: We hope we can, because they're both going to take a lot of time. The Norwegian thing, it comes up -- it relates a little bit to this Odyssey of Aldo Leopold.

KAREN BREWSTER: And Julianne Warren?

DAVID KLEIN: To Julianna. Julianne? Is it Julienne?

KAREN BREWSTER: I don't know if Julianne or Juli --

DAVID KLEIN: Julianne, yeah. Because she knew about me through the New York City university where they were coming from when they came up here. And the head of -- this is just background so I'll just go through it quickly that we can start and go through it again. But the key professor was a Norwegian guy who was -- this is complex. He was a great-grandson of the first industrialist that changed Oslo into an industrial city and an important one for Norway. And Peder Anker. And I think it was his great-grandfather who was this -- who became the mayor of the city back in the early 1800's, I think. At any rate, so he had done his undergraduate work at the University of Oslo. And he was interested in history and somewhat in philosophy, but history of a lot of things that were environmentally related, including Norwegian government and resource use. And he was such a top-notch student. He got a fellowship and did a PhD at Harvard. He wrote a book. It's over there. It's an excellent book called Imperial Ecology.

KAREN BREWSTER: And that's Peder Anker who wrote it?

DAVID KLEIN: Peder Anker. A-N-K-E-R. P-E-D-E-R, Peder. And he -- It's an excellent book about how ecology came into being as a field of study. And it's really complicated. But he's the kind of person, a Norwegian, that could do it, whereas an Englishman or American who comes from English origins, would find it hard because it was English botanists from the best universities, Cambridge and Oxford, that played a major role in all this. They were ahead of their times in understanding in England plants and their distributions of plant communities, and then they got into soils. And so, they were breaking the ground for European emphasis on understanding -- You know, a little bit of it was forestry, American forestry, who started a little bit from mainly German forestry, but they were influenced early on by the British ecologists, plant ecologist. And then this peculiar connection was that this guy, Jan Smuts, who was the South African general that defeated the British in the Boer War. He was a young -- down in the Natal

Province down there in Cape Town, but it was a wine growing area. And very fundamentalist. Dutch Huguenot people, Afrikaans kind of people, but they were the settlers. He was raised and he had real interests in church and church school, and, of course, it was all white then, at that university. And he was such a promising, intelligent guy. He had been convinced that he should become a preacher. But they thought he needed more education and broad, so they -- He got some kind -- He came from a family that wasn't wealthy. They got -- put together enough funding to send him to England to study at Oxford and Cambridge, and then come back. And theology was what they wanted him to study and what he said -- he assumed that was what he wanted. But he was a brilliant guy and he started seeing the connection between plant ecology and African natural environments. And he literally was weaned into becoming a scientist, an environmental kind of scientist. But he had tremendous curiosity, but he -- then he -- when he went back to South Africa, well, he was no longer headed the theological pathway. He was still a practicing theologian, or supposedly, but he was all into learning as much as you can about the environment. And he began to be interested in the Native people that grew up with that environment. And he realized that the Native people need more education. He was able to improve some of the agricultural activities with his knowledge he gained in the soil characteristics. And he became fascinated in the variation of soils and how that resulted in different kind of environments, different kind of habitats. And then he realized that, yeah, if you look at Africa as a -- at least Southern Africa as a whole unit, I mean, the peoples are living in different kinds of habitats, too. And some of them are savannah, dry, and some of them are really high veld, and some of them are down in the more tropical wet areas. And so he was a man really way ahead of his times. Well, then the South African Afrikaans government had a falling out. Or peoples. They didn't want to be ruled by the English and it was the English that was ruling. And so they went to war. And it wasn't -- the blacks were not involved.

KAREN BREWSTER: No. And that's the Boer War?

DAVID KLEIN: Yeah. So he was trained -- and had military training, too, in England. But he was a brilliant guy. And he put together this army of less well trained, in theory, Afrikaans people. These were the settlers that came with their wagons and farmers mostly. And, yeah, they had slaves but they also learned all these skills and had cavalry and had horses. Yeah, you had to be a good hunter, too. And they were excellent hunters and marksmen. And so he put together this army and the British sent their well-trained troops down there. And at first it looked like the British would clobber them right away, but -- and he didn't -- He had loyalty to England because that's where he got this great education. He had high respect for them. But it was his homeland. Then, he thought it was his. And because these were the people that went there, not the British, they came later. And they were the minority, but they were -- knew more about government than the Afrikaans people. And most of the people -- he was a forward thinker so that he wasn't down on the blacks like many of the Afrikaans farmers were because, yeah, they had problems sometimes with the local tribes would rise up and create problems. So they could fight them, too, if they had to, but this was the British. So at any rate, they defeated through his leadership. And the British were overwhelmed that he was such a leader and they also felt -- knew that he was trained by the British, so he knew the weaknesses and

strengths. And so then he was elected president of the new government, the Afrikaans government, and he put a big emphasis on educating the blacks. His whole attitude was these people have to learn how to live off the land and they have to do a better job with agriculture than they're doing now. And we can help them, but we have to train them. So we want them to get schooling and at the university level, too. And so he started this program, but they were not ready yet to take over control. And, of course, he didn't talk about that when he was the president, but that's what he had written about earlier on and talked about earlier before the war. And so then -- so he knew that there were -- and spoke openly about the blacks being inferior, but he said they're inferior only in their education and that means cultural education and everything. So he thought, you know, in the future then this land could support the people better, everybody better, if they knew how to use the land better and manage it better. But he was thinking in terms of areas that would be better if they weren't turned to agriculture, but we've got to manage those wildlife areas in a better way, too, so that you don't overharvest. So, of course, the population levels were lower than they are now. But at any rate, then came the -- and he set up the -- he created these new universities: Johannesburg, Pretoria, and Witwatersrand or something.

KAREN BREWSTER: Cape Town?

DAVID KLEIN: Cape Town. Cape Town was way ahead because they were already mixed with sailing peoples and mixed blood. And they were considered almost different people. Colored people rather than blacks.

KAREN BREWSTER: Right.

DAVID KLEIN: But then he -- We won't have to go into all this one because it's in history books and we're not rewriting history books. But then he -- when the Second World War came, and Hitler came to power, Hitler thought, "Oh, he recognizes that the blacks are inferior, so he's the kind of racist we want to work with." And he was originally from the -- the Afrikaans people were from Holland and their language was not too far from German. And then Germany had this -- maybe it was one colony they had, which was mostly desert, but had where all the diamonds were. But they hadn't discovered all these diamonds at that time. And so the allies -- Jan Smuts didn't -- he wanted to join up with the allies and be a general, because he was such a good general. He wanted to be a general and fight the Nazis in Europe. And the allies, and this was Roosevelt and the guy, the head of --

KAREN BREWSTER: Churchill.

DAVID KLEIN: -- Britain at the time.

KAREN BREWSTER: Winston Churchill?

DAVID KLEIN: Yeah, Churchill. Mainly those two said, "No, we -- the Nazis will go down and take up all of South Africa and that's going to be a major problem. And then

they would -- when they -- 'cause they're going to move into the northern Africa, the Nazis with their armies and if they come from the south, it's going to be -- just complicate things and especially if he has their potential armies down there to help him and they can take over other countries very easily." And so they said, Roosevelt and Chamberlain said, "We need him to be there in South Africa and join us, the allies. And then take over the German colony." Which was not too difficult. but it would have -- If the Germans were able to build bases there, Naval bases and what, that would have complicated the whole thing. And so he was convinced that he would stay there and do that and remain president. And then he had to change his tone though, because he didn't want to -- he tried to stay even more neutral about the difference between blacks and whites. So they wouldn't be confused by the Nazis by saying, "Well, they're a bunch of racists like us." Or something or in different words.

KAREN BREWSTER: Right. Well I think --

DAVID KLEIN: And they did have -- they respected -- In the government, they had some Jews that they respected in South Africa. And they respected the English, as well, because these were people that were interest -- they considered their home, too, and they had a long -- the British were, of course, later, the British were more proactive in trying to get rid of the nationalists and bring a vote to the blacks. The Jews, one or two Jews, and one was a woman. She was one of their most outstanding legislators, or members of their Congress or whatever it was. And she was respected by everybody, the blacks as well as the Afrikaans and others. Just because she was so damn intelligent and broad-looking and respect for everybody, and let's work for the best long-term interests. But after reading this, then I was really impressed with Peder Anker. And then he dug into the history of the environmental movement in Norway and published on that.

KAREN BREWSTER: Yeah, you shared some of that with me before.

DAVID KLEIN: Yeah.

KAREN BREWSTER: Right.

DAVID KLEIN: So -- And I did meet him when I was over there in 2008 and I had -- I was over there in February and I talked at this institute which was created by Brundtland, the woman Premier of Norway who was very popular and an environmentalist. And she -- Arne Naess by now was retired and getting old, but she created this institute within the University of Oslo. And it was something like -- this is after they became oil wealthy. And they gave him, Arne Naess, sort of like a senior status there. He had married a Chinese woman and his health was failing and he was getting senile and so he wasn't writing anymore. And this woman was sort of looking after him and representing his interests to some extent. But it was a graduate, like a graduate -- it's part of the university but it was focusing on development and the environment, I think it was if you translated it. And they were doing -- they had funding for some scholarships international, so they were bringing young people in from all over the world. And I -- and when I went over there I wanted to -- I was focusing on the attitudes towards climate change. But I wanted

to be based there, because I'd heard about it, and I corresponded and they said, yeah, they could have an office for me and that worked out fine. I was only there for a month. And then I went to Portugal for three weeks after that, which was part of it. But I had a chance to have lunch with Peder Anker. At that time, he was busy as a post-doc and he was -- he had married an American woman from New York City. And she did not want to be -- he could have gotten a faculty position in Norway. It would have taken time, but he would have to wait for retirements and he would have been happy to do that. But he also figured he would be happy in the United States or Canada, as well. Or England. And so he realized that she -- they married and wanted to have a family, but New York City was sort of idyllic. That's where she had family and she wanted to stay there. And he -- I think he met her when she was at Harvard as a student there. And so he was looking -- what he was looking for was a tenure track position because he was getting a pittance for what he was doing. And he was already getting a -- writing a lot of other books and they were all kind of unique in many ways. I haven't read a lot of his stuff, but it's -- he's just a -- he sees things and how do we interpret this in terms of the people that are there now. So we think a lot alike, but he's not trained as a biologist as I am. He's trained more as a historian and a writer, but he has good understanding of these things. So it's -- I sort of keep in touch with him a little bit. And I tried to get him up here on a post-doc earlier, and I thought he'd be just a great guy. I talked to Terrence Cole about this, and he said, "Yeah, that's a good idea." But, you know, I needed someone to follow through. I said, you know, if we can get him here and then the university could -- he could do the history of the Scandinavian, especially Norwegian, effect on the university and then go through all of these exchanges that we've had more recently and write it up, and he would be interested in doing that. But it could include, you know, the people like Arne Naess that came -- he didn't come to the university here but he was -- he spent time at a California university on sabbatical.

KAREN BREWSTER: Berkeley?

DAVID KLEIN: No, it was one further south.

KAREN BREWSTER: UCLA, maybe?

DAVID KLEIN: No, it was University of California at one of the -- it wasn't Stanford, but it was a university, a California system, and he spent a sabbatical year there and he was writing some of that and he visited other universities and gave lectures. And at any rate, but we can go into the details of my interaction with him.

KAREN BREWSTER: Right, like next time we'll go into -- we'll finish up some of this where your environmental thinking has come from and how it's developed in certain periods in your life. Okay?

DAVID KLEIN: Yeah.

KAREN BREWSTER: Alright.