NINA LEOPOLD-BRADLEY AND ESTELLA LEOPOLD DAUGHTERS OF ALDO LEOPOLD THE SHACK, BARABOO, WISCONSIN BY RICK LEMMON, SEPTEMBER 11, 2003

MR. LEMMON: I am Rick Lemmon. I am the Director of the National Conservation Training Center of the U.S. Fish and Wildlife Service and we are here today at a very special place with some very special guests; Estella Leopold and Nina Leopold-Bradley. They are Aldo Leopold's daughters. Steve Williams, the Director of the U. S. Fish and Wildlife Service is also here with us. Thank you all for having us here today. It is a pleasure and an honor to be here. We are here at a very special place to all of us in wildlife conservation. Let's first go around and introduce ourselves and say a little bit about ourselves and where we came from. Estella, maybe we could start with you?

NINA: I am currently a Professor Emeritus at the University of Washington. And I teach in the Biology Department. I grew up here on weekends at the age of eight. I was more of less the youngest of the siblings, my dear siblings. I guess I got interested in Botany through experiences here at The Shack. I majored in Botany and went through a degree in Botany and did pollen work, which was paleontology really. I worked with the U.S. Geological Survey and then decided that I wanted a teaching job so I went to the university in Washington.

MR. LEMMON: And where do you live now?

NINA: Seattle.

ESTELLA: I am the middle child. I was married to a geologist. We lived in Montana for a while. But when he retired, he made the mistake of asking me "How would you like to retire to The Shack?" So we have been here for the last twenty-eight years in retirement. It's quite clear that the experiences that we had here on weekends, growing up at The Shack have changed our lives and given us values that we might otherwise have missed.

MR. WILLIAMS: I am Steve Williams. I am currently the Director of the Fish and Wildlife Service. Before that I have a Ph. D. in Forest Resources from Penn State. I spent seventeen years working for State fish and wildlife agencies in Massachusetts, Pennsylvania and before coming to the USFWS, I was in Kansas. So I have been Director for a little less than two years right now. And again, thank you very much for inviting us here.

NINA: It's wonderful to have you here.

ESTELLA: It's a pleasure.

MR. LEMMON: Let's start by talking about this place. Estella, Nina talk to us about what this place meant to your father; what it meant to your family and what it meant to you as individuals. Please add in any interesting stories that you'd like to share about being here.

NINA: I remember in 1935 when Dad had decided that he wanted to find a place in the country. We had otherwise been camping here and there on weekends, but this place would be a more permanent establishment. He dragged us up here in February. Well, it was early spring and it was very cold. He drove us in and to our great surprise; here was this beat up little barn. It was really a chicken coop but it had animal dung in it; frozen

manure up to about here! Mother turned to Dad and said, "Aldo, are you sure you want to bring the children up here?" We immediately began exploring the place and shortly found that this was a wonderful place for growing up experiences.

ESTELLA: I think as we got involved, first in restoring or trying to make this little shack a little for habitable; as soon as we got involved we were completely hooked. And I can't tell you exactly why. We just fell right into it. In repairing this old building, Dad didn't go to the lumberyard to get whatever necessary materials we could use. But we went to the river, which is behind the shack picking up any old pieces of lumber; two by fours, bridge pilings, or what have you. That is what we used to restore the building. Dad went to the dump and picked up the door and the windows. I have often thought that I would have loved to have watched him going through the dump looking for what would be usable. But in his *Sand County Almanac* he said, "My own farm was selected for it's lack of goodness and it's lack of highway." I have always thought that this was almost an understatement.

NINA: There is a certain aspect of life here at The Shack that we ought to bring out; and that is as our brother Luna says, "It was a place that we learned to use our hands". We did a lot of carpentry and fixing. It was a place to be more sensitive to nature and to appreciate our environment; and to make music. We did a lot of that which was great fun. We it our 'experience at the Shack' and it was certainly special.

ESTELLA: And I'd like to add that if it weren't for our Mother's enthusiasm it never would have been the success that it was. But Mother worked as hard as anybody; at weeding or whatever it was. And it was a Leopold trait on camping trips, and this was kind of a camping trip, that the men took care of the women. I remember at dinnertime Dad would put Mother down on her chair, give her a drink and fix the fire and get the food. This is a Leopold trait, which I thought was quite nice, being a female!

MR. LEMMON: So you both enjoyed coming out here? This was something that you looked forward to?

ESTELLA: Dad never even encouraged us to come. He would say, "Your mother and I are going to the shack for the weekend, anybody want to come?" Well, of course we sometimes would stay home, but most of the time we realized we were really having a better time coming to the shack.

NINA: And it was lots of fun getting here. There was the old Chevy 1935 model and all of these kids. I think Starker was away part of the time, but there would be six of us getting in. I would sit on somebody's lap. And then, there would be a dog. We'd come up these fifty miles to the shack, and as Nina said, driving at about thirty-five miles an hour.

ESTELLA: With white knuckles!

NINA: But it was true, the closer we got to the shack, the faster Daddy went! In later years, there were animals that went besides the dog. We had pet crows, and some times a squirrel. Carl Leopold loved falcons and hawks. For a while he had a small falcon he was training for falconry. And one time an own, can you imagine a car full; when the dog is sitting in the back seat looking at this owl sitting in the front seat perched on Carl's fist? There were looking at each other like this! It was really quite entertaining!

MR. LEMMON: I remember when you both came out to NCTC the first time. We got you something to eat and you sat down to have your meal; looked up on the wall and saw this picture. Do you remember this picture?

ESTELLA: This is a picture of Dad, probably very close to where we are sitting right now. I guess that's a Jack Snipe. He is looking at what was in the crop, and weighing it. This was his special balance; a weighing apparatus with these little white porcelain tops. He was sitting right there, doing this, weighing the birds.

MR. LEMMON: Is that the Chevy that you were talking about?

ESTELLA: That's the Chevy!

MR. LEMMON: So that was you mode of transportation. And I understand that that was your mother's chair that he had out here too?

ESTELLA: Yeah, that's right.

NINA: Yes, that's the rocking chair.

MR. LEMMON: Did other people coming out with you?

ESTELLA: As youngsters, we brought our friends with us. And we found that we were having more fun here than staying at home so we brought...we all courted here by the way. There would be sometimes two or three friends on every trip. So it pretty well filled the old one-roomed shack.

MR. LEMMON: Did your father also bring grad students out with him at that same time?

ESTELLA: Very often, for the day.

NINA: They had these daylong field trips.

ESTELLA: He would take them all through the woods and ask them questions.

MR. LEMMON: Did he get some work out of them while they were here?

ESTELLA: I don't remember that. There was plenty to look at and for them to learn.

MR. LEMMON: I thought that's what grad students were for!

ESTELLA: Did you hear the Cranes going over?

MR. WILLIAMS: What has this place meant to conservation? Do people visit here often? Tell us about some of the people who come to visit and just be near the Shack.

ESTELLA: I think this whole project has become a metaphor; first of all for the delights of simplicity in your life. There was not room for a lot of stuff. When we'd come to the shack Dad would say, "Don't bring anything you don't have to have." It sort of becomes a theme. You don't need a lot of paraphernalia in your life. I think the whole idea of restoration began in Wisconsin, both at the Wisconsin Arboretum and here at the Shack. The science of Land Health was yet to be discovered. It was all trial and error. But I

think the whole principal of what happened here has become a metaphor not only for science, but also for simplicity of living.

NINA: This is more nuts and bolts type stuff, but when we started this was a cornfield. And Dad worked it just one step at a time. Nina said that maybe he didn't have the concept of how this country or this place ought to be restored. We stopped at road cuts and get these chunks of tall grass; prairie species and bring it out and set it in the cornfield. Eventually as the weeds came up we could burn it. That became, along with the work that John Curtis was doing at the Arboretum the element that the prairie so often needs for reproduction. Then it became a nice grass prairie with the expansion of these sods. It wasn't seed planting operation, at least for a long time.

MR. LEMMON: Nina, you were talking about fire lanes, plantings and also some experimentation that your father started.

NINA: Yes, Dad used to burn fire lanes across the prairie. Mostly it was to protect this area. As he burned he was realizing that the prairie was doing the best where he had burned the fire lanes. He was not doing it to maintain the prairie. This was before any experimental work had been done on the need of burns to maintain prairies. So it was sort of fortuitous that he was thinking about it.

ESTELLA: Then you might mention the little experimental plots. He established one or two little square meter plots where he removed every bit of roots and grass and so forth. He collected a few prairie seeds and sprinkled them in there and mixed them in. Three years later you could see this square meter of tall grass prairie up here on the ridge. I think that was the model that Nina and Charlie followed when they established the prairies there at the house area and the Two Bears Prairie and other places.

MR. LEMMON: Nina, I want to follow up: you said something about how this was kind of a metaphor for simplicity. When we talked before we came on camera a little bit you said something about working with your great-grandchildren, teaching them how to sharpen a shovel?

NINA: Yes, my little great-grandson Noah; aged five, has learned to clean the shovel. Of course that means turning on the water and all that good fun. But the principal of it is that he's learning to take care of his tools. It took us a long time to learn that by the way!

MR. LEMMON: Estella, could you read *Good Oak* for us please?

ESTELLA: The whole essay, or just parts?

MR. LEMMON: Just the beginning part.

ESTELLA: I might say that I was very fortunate in being the one who got to type this essay for the first time. One day, early in the morning Dad was working at the dining room table and I came down for breakfast. Dad handed me this thing and said, "Try this essay". I read it and it was wonderful. It was all written out by hand and I asked him if I could type it for him, which I did. That's the only one I got to type.

NINA: That's when we used typewriters rather than computers!

ESTELLA: *The Good Oak* [reading] "There are two spiritual dangers in not owning a farm. One is the danger of supposing that breakfast comes from the grocery. The other is that heat comes from the furnace. To avoid the first danger, one should plant a garden.

Preferably where there is there is no grocery to confuse the issue. To avoid the second, you should lay a split of good oak on the andirons, preferably where there in no furnace and let it warms his shins while a February blizzard tosses the trees outside. And if one has cut and split and hauled and piled his own good oak and let his mind work the while he will remember much about where that heat comes from and with a wealth of detail, denied those who spend the week in town astride the radiator." That's such a wonderful beginning to this essay.

NINA: That dates it pretty well; "astride a radiator"!

MR. WILLIAMS: So your father was concerned then that we were losing a connection to the earth and to the land?

ESTELLA: And we certainly have. My granddaughter who gardens with me said that her friends don't know how to cook vegetables. They get everything out of the can. It's just a shame how we have moved away from the land and understanding what sustains us.

MR. WILLAMS: And something as simple as gardening is a spiritual connection to the earth that we seem to be loosing. Those same friends probably do believe that vegetables come in a can.

ESTELLA: That's absolutely right. So we are an urban society in part, Steve.

MR. WILLIAM: Obviously, your father and this place helped you make that connection which has stayed with you for your whole life. Now, you are passing it on.

NINA: And that good oak was growing right over here on the ridge top, right next to the original road; which I gather was a covered wagon road at the time of settlement. It's a very old road. I also might add that there were many, many times when we were cold and wet. We were really not all that comfortable. We were all huddling around the fire. But there was a kind of togetherness that was really almost unique. The mutual respect between my mother and father was almost another kind of a metaphor for us. There was never any let up on that mutual respect. And it expressed itself in affection.

ESTELLA: And we might add Nina, that it was so much fun to be with Dad and Mother here. Dad would lighten up and he was just a lot more fun up here than he was in town.

NINA: There was lot's of laughter.

ESTELLA: And he loved it. Everything he did up here was just such fun.

NINA: Good point.

MR. LEMMON: Steve, I know that you've talked to me about how you hunt with your son now. Is that a tradition that was passed on to you from your father?

MR. WILLIAMS: It was. And fishing probably more than hunting. But I did have some opportunity to hunt with him. He fished a lot. Many times in the summer he'd fish every day before he'd go to work.

NINA: Every day! That's wonderful!

MR. WILLIAMS: Yeah, and maybe for an hour or a half an hour, but he just loved to do that. He passed that down to me. As a little kid, it really wasn't a choice. It was just, "You're coming fishing". And then, not that I didn't want to, but I was his buddy and friend that he went fishing with. That has left an indelible mark on me. There's no question about it. I hope to, and I think I have, passed that on to my son. As I get a little bit older and look ahead and think of the days that I won't be able to climb the mountains, or hike the prairies in search of pheasant and quail, those days will come. So now my joy in it comes from hoping that my son Matt will pass it on to his children. If I can do that, we are keeping the chain connected; from my grandparents, down to my great-grandchildren. That means more to me, I think, than the fun that I have when I hunt or fish.

ESTELLA: But Steve, it's another kind of bonding with the land. Whether you are fishing or hunting or kayaking or canoeing, anything to draw you to the land, and to really get some kind of ecological understanding. That is so important.

MR. WILLIAMS: Absolutely! One of the things that hunting does for me is that it makes me more than just an observer. I mean, we all observe what's going on. But when I hunt or fish, I feel like I am actually part of that ecosystem. Not outside looking in, but really becoming a part of it.

ESTELLA: Part of the drama.

MR. WILLIAMS: Exactly.

MR. LEMMON: I hear so many people say, and it's the same with me; it was "just being out there", that's what was special about being out there. Just the experience of being out there. You said, "beyond observing". But even for me, just being more observant, and really seeing what was going on around me. Often, I would just walk through it and not really observe and not really appreciate it.

MR. WILLIAMS: I have said to a few people that there aren't that many people, I don't think who have seen how the colors in the forest come out as the sun comes up. It doesn't go from black to green. It's goes from black to a kind of gray color. You can pick out in certain trees that the color is more apparent as first. I sit and think as I am looking around as the sun is coming up that there are a lot of people who have never experienced that and that they are missing out on so much. You are right. It's an opportunity to get out and be engaged and be part of nature; rather than trying to dominate it, which is what we as humans do too good a job of.

ESTELLA: So hunting and fishing are not an abomination or an inconsistency. But they are a mechanism where you can experience and be a part of the natural system. That's wonderful Steve!

MR. WILLIAMS: I agree!

NINA: It often occurs to me, especially here, to wonder what the original what the original or first people's experiences were on this land. We have record of a couple of arrow points up here that were buried in the sand, which are probably several thousand years old; who knows. But they must have seen some of the same nature here that we are looking at now and loving in their own way and being sensitive to it.

MR. LEMMON: I had a couple of pictures here; One if of your father holding up some fish. So your father obviously liked to fish.

ESTELLA: He surely did.

MR. LEMMON: Did you fish with him? Is that something that the children got involved in?

NINA: You know, I didn't fish with him or hunt with him. My brothers, all three of them did. Estella, you probably did. Estella is ten years younger than I am, so she sort of grew up as an only child. We had already taken off. So I think you did more with Dad.

ESTELLA: We have to say a little about the hunting part. Apparently, all of the boys were given a wooden gun to carry around while Dad was hunting. They would go out together and there would be this, "Keep the gun down and don't go pointing it at people" and all of this. So when they became sensitized to where this thing was pointed, they would eventually be able to use a gun. Well, then they would carry an empty gun around for a while. It would be the .20-gauge shot gun. And we always had a single shot .20gauge shotgun. I think that's still around somewhere; maybe at my ranch in Colorado. It's one that was the training gun for everyone. And I was the last one to use it. We were going out with Dad. At the last part of his life, he was hunting grouse up in Adams County. It would be just impossible for someone my age to catch up with them. You know those grouse would make a terrible noise and scare you when they were flushed. But he was a very, very good shot. I eventually hunted once with him for deer with a gun. Only once. And there wasn't any yield either, by the way. But I think that that hunting experience was just a good chance to be with Dad and to be with the outdoors. It never caught on with me. Now fishing, I remember his fishing on Lake Chapman. We'd get this old duck boat out and he would have be paddle very quietly along the shores. He would fly-fish in to the shoreline. We sometimes caught crappies or something. I don't know but there wasn't much in that lake. But it was fun and that was the point.

NINA: Can I add one other to the hunting story?

MR. LEMMON: Absolutely.

NINA: When we first bought the Sand County acreage Dad hunted woodcock on the property until one year we decided to census and study the spring courtship of woodcock. At that point, Dad decided not to kill woodcock on is own property. But he went up in to northern Wisconsin and killed woodcock. Then, pretty soon, as the study progressed and we knew how many birds we had, he didn't hunt woodcock at all. But it was sort of an evolution in his thinking. Not that he didn't enjoy hunting, but it was that he enjoyed the studying of it a little bit more. It took precedence.

ESTELLA: There is an essay, *Gus' Last Hunt*. I don't think he did much hunting after that, at all. Maybe there was an occasional trip with Bob McCabe to hunt grouse up in Adams County, but I think that about it.

MR. WILLIAMS: We have a picture of him here in New Mexico bow hunting. You both said that it was one of your favorite pictures of your father. When did he take up bow hunting?

NINA: He became an archer in the early 1930's. When he started hunting with the bow and arrow I think was considerably later than that. He used to go to Mexico; I don't know whether it was every year, but quite often to hunt deer with the bow and arrow. In all of the years that he did that, he never hit a deer, or never killed a deer. His brother

would kill a deer for camp food. But Dad never connected with the bow and arrow. Nor did Mother.

MR. WILLIAMS: Proving again that it's not about....

NINA: It's not about bringing home the harvest necessarily.

MR. WILLIAMS: Exactly!

NINA: You are right Steve.

ESTELLA: You should add about the archery that Dad made his own equipment.

MR. LEMMON: Oh really?!

ESTELLA: He was an excellent craftsman and carpenter. He would work for long hours in the basement making these gorgeous bows out of Yew wood and lemon wood and other kinds. Luna knows the details on this. And then he' make his own arrows. When he was working for the forest products laboratory he found a way to buy these little square staves, just a little longer than an arrow. He would put them on a little mill that he made in the basement. He'd turn these things. And actually, with sanding equipment, he ground them down. They were absolutely straight. He would look at them, like so, until he got them right. If they weren't straight, "Just throw then out". That was one reason why Mother, who was an excellent archer, was so accurate with her good bows and very straight arrows. She was really a "dead-eye dick'! Nina, tell us what she won.

NINA: She was Champion for the State of Wisconsin, four years in a row. Then, the national tournament, she was fourth, I think. And Dad was so proud of her!

ESTELLA: She was a good one!

MR. LEMMON: How did you become inspired to pursue your career?

ESTELLA: I guess when I was somewhere between eight and twelve we were at home and I approached Dad and said that I that I wanted to become an Entomologist, a 'bug-ologist'. He looked at me and lit his pipe and kind of talked about, "Well, let's talk about this. Why did you want to become an entomologist?" I said, "Well, all of the other fields are taken." Nina was a Geographer, Luna is a Hydrologist, Starker is in wildlife ecology and Carl is a Botanist." There wasn't anything left but entomology! So Dad said, "Well, I'll tell you what dear, on Monday let's go down to the book store and we'll get a copy of Norman Facet's *Spring Flora of Wisconsin* and a vasculim," which is what we used to collect plants in; "and let's see what you can do with that, okay?" And he did. I did, the very next weekend. I was right up here, over the next hill and my first plant that I identified was a big thrill. *Lycemaicia Quadrafolia*. I brought it to him with great pleasure. I was hooked. I was a botanist, and that was how it happened. Nina, how did you get in to geography?

NINA: It took me a lot longer to evolve than my siblings. But in my first marriage, we had studied waterfowl biology. We studied the Nay Nay Goose out in Hawaii. Then we did a study of Antelope behavior in Africa for a year. I was sort of the assistant on all of those projects. But it wasn't really until retirement when we moved back to this area that I became very much involved in particularly prairie restoration. We did some very, very early research on prairie restoration. We also evolved a graduate program in ecological research on the Leopold Memorial Reserve. We had graduate students working with us

every year with supervision by the faculty members. So It was sort of an evolution in my life.

ESTELLA: There was another aspect to your work Nina. That was the Phonology. Dad was always keeping track of the first blooming dates; the first fruiting dates, the first arrival dates, the first song times in the springs and all through the seasons really, of birds and flowers and so forth, and trees. There was a gap in his records, after 1948 until when Nina and Charlie came here to the reserve. They have now kept records ever since. Now, Nina is keeping those records. So we have a very nice record of it.

NINA: We have about sixty-eight-year record of phonology, and recently published a paper. Can I give you the general jist of it?

MR. LEMMON: Sure.

NINA: We keep track of about three hundred items. On a third of the items we are comparing our data from 1978 to 2003 with my father's from 1935 to 1948. On a third of the items, we don't have enough data to speak to. One third of the items are coming three to four weeks earlier now than when Dad was here. A different third of the items are coming right on target. The point being that they are probably responding to day length; photoperiodism, rather than temperature change. It was our Executive Director Buddy Huffaker that looked at this data and said, "You know, they are separate; those responding to day length, and those responding to temperature." So we now have quite a good database and we are concerned about keeping that database going after we are gone.

ESTELLA: And there paper, with Buddy Huffaker is published in the <u>Proceedings of the National Academy</u> about four years [ago].

MR. LEMMON: Steve, how did you get started?

MR. WILLIAMS: People have asked me how I got interested in fish and wildlife and I really don't know. I have never had any other interest from the time I was a little kid. I guess I didn't know that there were Fish and Wildlife Biologists when I was little, so I probably wanted to be a Ranger, or a Forester or something. I think that also my father played a big role. We always lived in rural areas so I was out. In the summer it was shorts and sneakers and that's all we wore. We ran around and explored like all kids in rural areas do. But he loved nature specials on TV; Wild Kingdom, American Sportsman, and wherever I was, and he happened to be watching TV and one of these shows would come on he'd yell for me to come down and I'd sit there beside him. It seems like we did that a lot. It's one good thing that came out of TV. We could talk forever about what TV is doing to kids now! But I think that was it. He had a tremendous interest in it. He was a farmer and was always involved in agriculture. That certainly played a role. Fishing with him played a role in it. Just being a kid growing up in the country did too. I just never had any desire to do anything else. So I don't know, maybe it was innate. I think it's time for kids to put down the remote control and the video games and pick up a shotgun or a fly rod and get out. Whether it's a shotgun, a fly rod or a pair of binoculars or a camcorder, just get out there.

NINA: Whatever! Steve, there's a nature center in Madison, Wisconsin which deals with every school child in the town of Madison. They come out and they get on their belly boards and they get right on the land. It's really a wonderful asset. The Board of Education has quit funding the transportation costs. You just wish that everybody appreciated this wonderful facility. Steve, may I add another thing? Do you remember when Ding Darling was head of the Fish and Wildlife Service? He had been in that

office for a year and wanted to move out of it. He called my father and asked him...you probably know this history...and asked Dad if he would be interested. Dad was having a hard time deciding. I remember one evening he called his brother long distance on the telephone. This must have been about 1934. He asked him what he thought about should he take this job or not. Dad had been out of a paying job for two years. He had been writing *Game Management*. Uncle Carl asked him all kinds of questions about the job. One of them was, "What are they going to pay you?" And Dad said, "I forgot to ask!" But anyway, as you know, he didn't take the job. But it was wonderful that he was asked.

MR. LEMMON: Let's talk about another subject. Let's talk about deer. I know that during your father's time, he took a lot of criticism because he was very much in support of antler less hunts. As a matter of fact, I guess, helped get an antler less hunt started in Wisconsin in 1943. I think his critics called it the 'slaughter of 1943'. Did you have discussions with your father back then about what was going on with deer? How does that relate to today?

NINA: I can remember when he was arguing with the Conservation Commission at that time. He was trying to persuade them that we had an over population of deer. He was also trying to promote an antler less season. He was unable to convince, even the Conservation Commission that this would become a part of the law. The reason I remember it is because I remember a great sense of depression at this time. Dad figured he couldn't even persuade his colleagues that this was important. And I think it was shortly after that when there was a big die off of deer in northern Wisconsin. Eventually of course, we got an antler less season. At the moment, on the Leopold Memorial Reserve, a hunter has to shoot two does before he had the privilege of shooting a buck. Already, we are seeing bigger and better bucks. But we are terribly overpopulated still. It's my personal feeling that hunting can hardly control the deer population. I think we need wolves as well. And I don't think we're going to get them!

ESTELLA: Nina may remember the experience, when Dad and Mother and Nina and I had once when he was called to consult on the question of management of some old growth hard maple forest, up in the peninsula of Michigan I think it was. Mother and all of us had a nice weekend up there. Dad was looking over the woods and he wrote a report on how to handle this old stand. Up there, he was pointing out the importance of the little Hemlock production, which was being decimated by the deer. This was a very important problem of management for this reserve. I think that Curt Miene has written an excellent story about this Lake Huron Report that I am speaking about, which Dad wrote. But to date we are still way over populated. On the Leopold Reserve we have no reproduction in White Pine. On the Potter Reserve we have no reproduction on White Oak. The deer just get all of the seedlings.

MR. LEMMON: Steve, you started out, as a Deer Biologist didn't you, in Massachusetts?

MR. WILLIAMS: I did, in 1985. It's sad that we don't learn our lessons very well because to this day that continues to be a contentious issue; whether we should harvest antler less deer. From a professional or from a biologist's perspective there is no question that we need to do that. It's interesting in one way, as I said, and kind of sad in another that we continue to have disagreements or arguments about the need to control antler less deer; how many, when, where. I would hope that maybe would have learned more in sixty or seventy years, and we keep moving forward. I think every state now in the country recognizes how important it is. They may struggle with their hunters more so

in many states with animal right activists who don't see any need to control any kind of wildlife populations.

NINA: And it's urban as well as rural.

MR. WILLIAMS: The big problems in deer management today really are the suburban and urban deer herds. They are very difficult to control. If it's difficult to control it in a rural setting and get overpopulations down in a rural setting; you can just imagine how difficult it would be in a suburban area. I live just outside of Washington, D. C. and there are deer all over the place in very residential, high housing density residential areas. We still see deer wandering around. In fact, I saw a red fox run across our little road just nine miles outside of Washington, D. C. I marvel at wildlife's ability to cope with the barriers and difficulties we put up for them. Yet, they seem to be doing quite well.

NINA: Isn't that amazing?! It's interesting to think ecologically what Leopold would think of the situation. First we have over population in the clear-cut areas of forests in northern Wisconsin: the old growth and the regrowth providing a scenario for deer reproduction. Then we have ungulate [hoofed mammals] over population in all parts of the northern states. Then it came to the Rockies. And of course there was the original over population of the Kaibab Plateau [northern Arizona], which he wrote about; it was decimating the re growth of forests there. Now, there is deer wasting disease and ecologically it's a very complex problem with the ticks involved also. It's really something that Gene Likens at the Institute of Ecosystem Studies in Millbrook, New York has studied. It's alarming what's happening to our environment.

ESTELLA: But isn't it a symptom of over population?

NINA: Oh, of course. We've exceeded the carrying capacity, so something is going to knock it back. Too bad it has to be disease.

MR. WILLIAMS: One of the concerns that I have is the American people, even though they are getting less connected to the land and wildlife, seem to have an appreciation for wildlife. They may not understand it, but they have a tendency to love wildlife. My concern is; with chronic wasting disease and with Lyme disease, with over population of resident goose populations, I am concerned that the people who don't understand are going to start viewing wildlife as a problem as opposed to being something to be cared for and nurtured. They may begin to feel that it is something to be controlled and eliminated. That's a concern.

MR. LEMMON: That goes back Steve to some of the things that we have talked about; again, there may be people coming out of schools and not coming out with the wildlife management background and not understanding the need to manage wildlife populations.

MR. WILLIAMS: If you look at it, and you all are maybe in a better position to judge that I am, but if you think about how academia has evolved from the time when your father was a professor; who spent his weekends here farming and fixing up The Shack, fishing and whatever. I am afraid that we have kind of evolved in academia; professors, just like the rest of society are less connected with the land. It seems to be academics breeding academics. That's not all bad, and I sense from talking to professors from some other universities that they are seeing the same thing. Not only are the kids more urbanized and less in touch with the land, but some of the professors now are becoming the same way. And they can't impart those values on their students because they haven't had exposure to them. That does concern me. And we see it at State fish and wildlife agencies with new people coming in. We see it at federal agencies. There are good,

smart men and women coming in but they just haven't had the opportunity to be exposed to things that your father and you were exposed to, and his students were exposed to.

NINA: Steve, even science is moving away from it. My brother who is at Cornell University said that among many, many scientists 'if you are interested in anything bigger than the cell, then it's hardly science'. It's another direction.

ESTELLA: Talking about your service, Steve. The importance of wolf introduction in some of these areas is, I think, a very important element that Dad would have foreseen when he wrote his critique about wolves in America. He pointed out the importance of those predators. The land ethic was beginning to appreciate that element of control, which we need, desperately, now.

MR. LEMMON: And wasn't that an evolution in your father's thinking?

NINA: Indeed!

ESTELLA: Oh yes!

MR. LEMMON: Was that in his essay *Thinking Like a Mountain*?

ESTELLA: That's right. When he was a young man in the delta of the Colorado River, he and his brother were killing coyotes and bobcats as quickly as they were getting their own meat. Then of course, he wrote *Thinking Like a Mountain*. But this was one of his wonderful qualities; he could completely reverse directions and say, 'I was wrong, and now I believe I understand'.

NINA: And take an ecological view of ecosystem; all of the elements in it.

MR. LEMMON: Did your father have much success, I mean obviously he loved the land and came to this farm which was kind of worn out and tried to bring it back to life again, and bring the land back; did he have much success in working with private land owners or farmers?

ESTELLA: I'll tell you, he had a knack for talking with farmers, which was rare and wonderful. I appreciate that quality in some of our young people here today. Going to Riley and talking to the farmers there; he would start with, "Well how's the alfalfa doing this year?" Then he'd go on to talk about the corn or something. He'd finally get around to what he really wanted to talk about which was the snipe population on this creek down here. And would they be interested in pheasant culture, which would help. There was a whole complex that he built up to. I was with him when he went over here and talked to Baxter and try to buy this forty acre piece right across from The Shack, which was Baxter's hay field, right next to Lake Chapman. There was this dialogue that started with the weather and the crops and the cows, and 'how's the Mrs.?' And all of that. Finally, he'd get around to, "Hey, how about that track over there? Would you be interested in selling it?" He eventually, of course, got that track from Mr. Baxter.

ESTELLA: I can even remember one time when he said that one of the things he had to learn was to be able to sit down with the farmer on the doorstep and not talk at all. Just sit! I mean, this was a way of communicating.

MR. LEMMON: Well, we have so much in common, or should have so much in common with farmers and ranchers. Steve, I know that that is something that you've been talking to our employees about in the Fish and Wildlife Service. You stay very

active with the Cattlemen's Association. I guess when you were in Kansas it was virtually all private land.

MR. WILLIAMS: In Kansas, about ninety-seven percent of the land is privately owned. When I started there; I'm not real bright, but I am bright enough to know that if you are going to have an impact on fish and wildlife in a state that is mostly privately owned, you need to work with the landowner. I spent a considerable amount of time working with the Farm Bureau and the Kansas Livestock Association basically on just a personal level, just like your father would. I was getting to know people individually and letting them know that I respected how difficult it is for them to make a living at farming or ranching. They in turn, I think, had some respect for what we were trying to accomplish as an agency. We took a situation where I think; some wildlife professionals are at odds with farmers. I think it's because they don't take the time to sit down and find out about each other and have a better appreciation for what each is trying to accomplish. When I went to Kansas we had lots of conflict with these groups. By the time I left, and I am not trying to brag, but I was proud. We even testified together on the same Bill! The three representatives from the Farm Bureau, the Livestock Association and myself, just as a joke went up and put our arms around each other's shoulders. The Chairman of the committee said, "Stop, someone write this down and take a picture! This never happens!" But we need to work, there's no question, with private landowners and respect what they are trying to accomplish and work with them. We should provide them with incentives if we can, and provide them some technical assistance if we can. But it starts with respect for them as individuals, and for what they are trying to accomplish for their family; and that's just to make a living like we all need to do. It's more important now, I think, than it ever was.

ESTELLA: That's one of the issues that's very important to us at the Aldo Leopold Foundation. Our staff is doing a great job in contacting farmers and helping with making arrangements for the restoration of wetlands and of course there is a lot of work with prairies and woodland management. We have a school; the Woodland School of Restoration for private landowners who are interested in restoration. Yes, we very strongly promote that also.

MR. WILLIAMS: Farmers have the same, most farmers and ranchers, have the same land ethic that we do, or should aspire to. I think we just need to understand that as a profession.

MR. LEMMON: I mentioned before we started that one of the things we are trying to do at the National Conservation Training Center is to bring all of these different sectors together. We bring in ranchers from New Mexico. Syd Goodloe and his wife Cheryl came and talked about what they have done with their ranch in New Mexico. And we talk about restoring landscapes. When they talk, you see the passion and the love and the connection to the land. I was talking about that at one point and Art Hawkins, who you both know very well; Art was a FWS employee many years ago and a flyway biologist. He sent me a quote from your father that I had never seen before. If I could just read this: it says,

"There must be some force behind conservation, more universal than profit; less awkward than government; less ephemeral than sport, something that reaches in to all times and places where men live on land. Something that brackets everything from rivers to raindrops and from whales to hummingbirds, from land estates to window boxes. I can see only one such force; a respect for land as an organism, a voluntary decency in land use expressed by every citizen and every landowner out of a sense of love for and an obligation to the great biota we call America."

When we look for something to connect us, what better to connect us than what we come from which is the land?! But how are we doing? What would your father say?

ESTELLA: I think he would be depressed about many, many issues. I think the noise from I-90, right here, is an example. Or maybe it's almost a metaphor. We are so mechanized that I think we loose touch with what sustains us. I think there probably must be some things that he would be cheered about. I sure like what Steve is doing.

NINA: I think it's very hard for us conservationists to be positive; optimistic is the word, in light of all of the changes that are going on around us. But I'll make you a bet that Dad, like Mrs. Murie, if he were around, would want to keep up that optimism because if we loose that, we're not going to do much are we? I think that's important.

MR. LEMMON: Steve, do you have any thoughts on that?

MR. WILLIAMS: I can't say it any better than what Nina and Estella have both said. I love what you said about how if we loose the optimism, we've really lost, in spite of things that aren't going the way we'd like to have them go.

NINA: We have to keep trying.

MR. LEMMON: We have to pass on the optimism and the passion to the next generation. They need to pick up where we leave off and carry it forward. And as you have all said, there are bright, passionate, dedicated people out there. If we can pass our experience to them and hope for the best, and hope that they can pick up and take it from there.

NINA: I think our staff and our interns here are another really optimist element of what we are all thinking about. These young people are experiencing hands on experience. They are doing hard work. We pay them very little. But I think they are a major force in what is coming ahead, at least locally.

ESTELLA: And it builds careers. A lot of the young people that have been here with our staff as interns or as employees take off and go to graduate school and take Ph. D.s in Restoration Management, or Wildlife Ecology or Botany, or whatever and we are very proud of that. A lot of the students that worked here when Nina and Charlie were Co Directors of the Leopold Reserve have exactly done that. There is a rather vast literature from people that they sponsored.

MR. LEMMON: So we need to pass the optimism to them, but at the same time, I think that's where we get out optimism; by looking at the young people and seeing the passion.

NINA and ESTELLA: Absolutely!

MR. LEMMON: Whether it's our children or our students. Did your father ever talk about the National Wildlife Refuge System, or refuges in general? We just celebrated the 100th anniversary.

ESTELLA: I am sure that he was very much involved. But I do not remember much discussion with us. He was very active at Delta working with the migratory waterfowl situation and habitat work up there in Manitoba.

NINA: The whole refuge system is absolutely essential. To me it's just as essential as the Wilderness Act or anything else. Any way of using land in a very positive way is very important.

MR. LEMMON: And using the land as an educational tool as well. You mentioned children. There has been research done that shows that for people to really connect to wildlife and nature, they have to have a hands on experience with it at some point. It can't just be by watching TV. That might draw in interest, but at some point they have to go out and touch and feel it. You talked about the wonderful program that they had here, I guess, in Madison. And we have all of these wonderful laboratories called National Wildlife Refuges that are in urban areas as well. In some ways, maybe the urban refuges are just as or more important because it gives the place. [For kids to go]

MR. WILLAMS: They may be. They may be Rick, because we tend to think about the big refuges in Alaska and Montana. But it's those that are accessible to people that have programs which make folks aware of what's out there in nature. They may be the most important ones. They may be small, little refuges compared to places like Alaska, as I said, but we work very hard at trying to get our Refuge Managers and staff to get kids and the community involved in our refuges. They do a tremendous job; with limited resources, admittedly, but they do a tremendous job in getting kids involved and getting their hands dirty, their feet wet, looking at bugs, looking at whatever is there on that refuge.

MR. LEMMON: One of the things that struck me when we were talking earlier about the connection to the land and children; the other common element I heard from all of you was your parents and how important that connection was. This goes back to your metaphor about being able to slow down.

NINA: Yep!

MR. LEMMON: I think that's one of our problems today. We just do not slow down long enough to take the time.

NINA: And this brings up another point with my father. He was a very busy man. He was in demand. He was a university professor. But when it came to weekends; this is where he came. I often wonder how he ever arranged his own personal program. But come Saturday, we were here and we were here until Sunday night; and nothing interfered! It was a matter of management I guess.

MR. WILLIAMS: He had his priorities.

NINA: Right Steve, priorities!

MR. LEMMON: About four years ago now we had a wonderful gathering at NCTC. You were both there with about 150 of our closest friends. It was the 50th anniversary of the *Sand County Almanac*. Art Hawkins was there as were many others. One of the highlights of that gathering, Nina, was when you read *If I Were the Wind*. You said it was your favorite passage from your father. Could you maybe read that to us now?

NINA: I would be more than pleased. Let me find it here.

"The wind that makes music in November corn is in a hurry. The stalks hum. The loose husks whisk skyward in half playful swirls, and the wind hurries on. In the marsh long windy waves surge across the grassy sloughs, beat against the far willows. A

tree tries to argue, bare limbs waving but there is no detaining the wind. On the sand bar there is only wind and the river sliding seaward. Every wisp of grass is drawing circles on the sand. I wander over the bar to a driftwood log where I sit and listen to the universal roar and to the tinkle of wavelets on the shore. The river is lifeless. Not a duck, heron, marsh hawk or gull that has sought refuge from the wind. Out of the clouds I hear a faint bark as of a far away dog. It is strange how the world cocks it's ears at that sound, wondering. Soon it is louder; the honk of geese invisible, but coming on. The flock emerges from the low clouds a tattered banner of birds dipping and rising; blown up and blown down; blown together, blown apart, but advancing, the wind wrestling lovingly with each winnowing wing. When the flock is a blur in the far sky I hear the last honk sounding Taps for summer. It is warm behind the driftwood now, for the wind has gone with the geese. And so would I, if I were the wind."

ESTELLA: Very nice, Nina.

MR. LEMMON: One last thing I'd like to do... As we talked about earlier, part of our optimism comes from seeing the young people today that are coming up to take our place. Working with them. At NCTC, as we said, we built that place to be here 150 years from now. So if there is one message if this video were shown, and it will be shown, thirty years from now to a group of young fish and wildlife conservation professionals who are coming there to start their career. If you had a message, one thing that you could tell them, is there anything you'd like to share?

NINA: Try! Try! I think the most important thing for me would be to have our young people see what they are looking at. I think so much goes by that we really don't even acknowledge.

ESTELLA: I would like to suggest that one of Dad's adages was, "Do the right thing!" Ecologically, politically, or whatever, but "Do the right thing!" and whatever that is can be a good guide for all of us, and in the future too.

MR. WILLIAMS: I think those are wonderful messages. I would just add to it; Don't forget those that came before you. Learn from their successes. Learn from their mistakes. I think I'd tell them to read *Sand County Almanac* thirty years from now, and thirty years from then.

NINA: That's very nice Steve.

MR. LEMMON: Is there anything else that anybody would like to talk about or share? Any last thoughts?

MR. WILLIAMS: All I would share is that it has been an incredible pleasure to be here with you and to have you take the time to sit and talk with us, on this site. It's been incredible.

NINA: It's also been a true pleasure for us!

MR. WILLIAMS: I was thinking about this yesterday as I was flying here yesterday. I was thinking about what your father said about the connection to the land and about the importance of conservation. I started thinking that it's more than conserving the land. It's conserving our souls, because our souls are in that connection. If we loose it, we are soulless in some ways. So I hope as a nation, as a world, we'll realize that connection before it's too late. Your father showed us the way. I am optimistic. And I am optimistic because of the children.

NINA: Thank you very much!

MR. WILLIAMS: *Thank you both, very much* for being with us!

ESTELLA: Let's start with Thanksgiving. We always came to The Shack for Thanksgiving. We usually had a friend or two with us. We would all cook the supper together. It was always kidney stew. It wasn't steak and kidneys stew because we couldn't afford the steak. But you could buy two kidneys for twenty-five cents. And then we'd have all of the vegetables. It sounds terrible, but it was really delicious. I remember my father would take his first bite and say, "This is better than any god dammed turkey I ever ate!" Maybe that's not quite fair, but

NINA: We made it in a Dutch oven too!

ESTELLA: I want to tell one more story that just came to light when the DNR was here the other day, Buddy. [Mr. Huffaker has joined group] One of my father's students was here. I can't even remember his name. He asked me, "Do you remember one time, at the end of a long field day, and we all came in to the shack?" I did the cooking and I had it all in the big Dutch oven and as I was lifting it off of the coals, it tipped over and fell in to the coals. This student was there at the time and he remembers! We pulled it all back together, back in the Dutch oven and that was our supper! But you know, people had been out in the field all day. Everybody was exhausted and very hungry. They had watched this whole process. I'll never live it down!

NINA: I hope they got something to eat!

ESTELLA: There's another story we should tell that's kind of funny. Dad and Carl were off in the slough back here on the island. They picked up a long beam of some kind that had washed up from a flood.

NINA: It was a bridge piling I think.

ESTELLA: It was the size of bridge piling. They had it on their shoulders and they were walking across the ice toward the shack. Carl went through the ice. Dad stood back, and here was Carl standing this deep in freezing water, trying to get out. We laughed and laughed; it was so funny! I don't think he appreciated it, but it was a good time. He had a good sense of humor. Do we have time for another story?

MR. LEMMON: Absolutely!

NINA: It was spring vacation and we had planted quite a few trees. And Dad and Carl were walking back over the edge of the sand hill and went down in to the low land where they had planted pines. There were four people, two men and two women with their hair all up in curlers and with plastic covers over them. They were digging up the pines! Dad went up and said, "What are you doing?" They said, "Oh don't worry, we're just going to move them over to our back yard." And Dad said, (he was able to swear once in a while, I have to tell you), "God dammit" or something like that. One of the men said, "Shhh, there are women present!" And Dad started to laugh. I thought he was just going to die. He was howling! Nina, tell the big story.

ESTELLA: It was spring vacation and planting time. I have forgotten what year, but it was tenth grade probably. I had a squirrel, which the postman had brought while Mother and Dad were up here on university spring vacation. Mine came later, so I was going to

come up by bicycle later. Had obtained a crow earlier that was I think we called him 'Sammy', from when Jimmy Telfred and I went out and climbed a tree out near the reservoir above west high. We got these little babies. He had a crow and I had a crow. Mother and Dad brought the baby crow up here. It was flying around all day, and they put him away at night. I had this other animal. But I took the train to Baraboo, and got on the bicycle. I had a little knitting bag with that little squirrel curled up in it. I went down on the other side of Lake Chapman because it was in spring flood. I realized that I couldn't cross the ditch. I had to swim through the marsh. I was coming across with this little squirrel holding him up like this. It was quite difficult.

NINA: May I take over?

ESTELLA: Yeah, go ahead!

NINA: Dad and I were standing on the edge of the marsh here, looking in that direction. We saw something coming and we couldn't figure out what it was! Pretty soon, here came Estella treading water with this squirrel on top of her head. She was going to get here h--- or high water! Dad started to laugh again. I tell you, he could hardly stand it. Here was this little gal! She was going to get to the Shack! I didn't mean to interrupt!

ESTELLA: I guess I was a source of some amusement here! We planted trees for several days and it was time to come home. But we couldn't drive out because the whole road was flooded. So somebody walked up to Joe Lewis' place and asking him if we walked up there, would he give us a ride in to town. They said it was okay. But I had a bicycle on the other side of Lake Chapman and Mother said, "You do the bicycle Estella, but I am not taking your crow!" I had to take the crow. So she took the squirrel in the little knitting bag. They went up there. I got on the bicycle and was on my way to Baraboo. I was all of the way up just toward the cemetery, pumping up that hill and the crow was sitting on the handlebars. He was tied there with a shoestring. He loved it. It was great! All of a sudden this truck came whirring up behind me; "Beep-Beep!" I stood up very quickly and tore my good pants. Here comes the family roaring on by, "Hello!" So they went on to Baraboo and got on the first train. Dad was sitting in the railroad station, waiting for me with the dog. So we sat down and after a while he said, "Why don't you do something with that crow? Maybe you could take him in the washroom or something." There wasn't anybody in the Baraboo Station. I took him in the washroom and put him on the hot water tap with the string. He was sitting on the basin. All of a sudden, two women come bursting out of the washroom and came tearing across. They announced to the conductor who was standing there, "There's a raven in there, there's a raven in there!" We finally got on the train. The dog was checked and the crow, we wrapped in Dad's newspaper and just held him, like so. Dad was reading the rest of the newspaper and pretending that he didn't know me, I think. We got in to town and it was quite difficult to get a taxi because we had these animals. We finally got one and made it home. But that's the end of that story.

MR. WILLIAMS: That's great!

MR. LEMMON: Well thank you, very, very much! Buddy is there anything else you want to try to capture?

MR. HUFFAKER: How about the Parthenon?

NINA: The story varies, but I'll give you my version! My brother Starker went out and put together the outhouse. When he got it all finished he walked in to camp and he said,

"It's just as beautiful as the Parthenon." This little gal here, several years later, discovered that there was also a Parthenon in Greece.

ESTELLA: The privies, to this day at our shacks are called "The Parthenon".