TRANSCRIPT
INTERVIEWEE: **Reggie James** (RJ)
INTERVIEWER: David Todd (DT) and David Weisman (DW)
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DT: My name is David Todd and I'm for the Conservation History Association of Texas. It's October 15th, 2003 and we're in Austin at the offices of the Southwest Regional Office of Consumer Union and we're fortunate to have some time to interview Reggie James who's the director of the office here and an attorney and somebody who's been active in advocating for the food safety of better pesticide use and has been involved in a lot of the discussions about organic certification, genetic engineering, utilities, better access to courts and public decision making and wanted to thank him for taking the time to talk to us.
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RJ: My pleasure.
DT: I thought we might start by talking about how you in fact got started in this public interest arena? What might have been an early influence from parents, teachers or other events?
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RJ: Well I –I think it's—there are a million roads to get to where you are at any point in life and I'm sure that there were a couple of major influences, but generally it's…
DW: I'm sorry I don't mean to interrupt…
DT: Maybe we can start again and ask how do you think you got to an interest in involvement in a public interest world?
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RJ: You know, I was saying that, you know, there's lots of influences, but the ones I—that I can, kind of, remember that I think put me on this track is one as a very little kid I've always kind of had a sense for fairness, rooting for the underdog, you know, playground fights with bullies, those types of things. But my dad was in the military—was in the air force. We moved around a lot so I had to also make friends a lot whenever we'd move and we lived in places that I kind of consider majestic. I was born in Colorado and, you know, the mountains are there. We used to go up to the mountains a lot just visiting. My dad liked to hunt and to fish so I always went hunting and fishing with my dad. I did like to fish. Hunting I used to like to do just to be in the out a doors, but I didn't particularly care for guns very much, much to my dad's consternation, because I used to flush rabbits when—when he was hunting so he used to come home
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without rabbits frequently if I went with him, so I didn't get to go on all of the hunting trips. I use to annoy both him and my brother. And both of my parents are from Louisiana. My

dad's from New Orleans, he's a city boy. My mother is from a really rural area outside of Baton Rouge. I used to spend summers with my mother's parents and they had a farm outside of Baton Rouge. It's a lot of bayous out there. And I used to love it, because it was just out in the woods. It's like stepping into another century unrelated to just about everybody in the little community there, but it was beautiful. I mean it's absolutely—it's like a rain forest. It's very green; things grow there very readily. And once incident in particular I remember when I was probably about twelve or thirteen and I was spending the summer there and I was pumping water from the well—
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they had well water, and I noticed that there was sort of a shimmering rainbow kind of aspect to the water. And my grandmother said that that's because of all these chemical plants out here that they're just messing up everybody's water. And I'm—she was just convinced that it was bad. I mean it had a smell to the water that—the water there had a natural sulfur smell which kind of, sort of a rotten egg smell, that was the natural smell and I'd—you'd have to get used to it, but after you got used to it, you liked the water with the sort sul—sulfur smell, but this was different and she would—she knew that it was different. And she had just an ongoing argument going on with the people that were the next generation, that would've been the generation between me and my grandmother, that would've been my parents generation, they were all happy with the plants being there because they were providing some jobs, although a lot of the jobs were not that
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good. There was still a lot of vestiges of racism there so a lot of the people that had the good jobs typically weren't even from Louisiana, they were from somewhere else and a lot of the menial labor were the African-Americans in that general community. Well my grandmother's belief was is that the piddley jobs that these plants are providing are not worth what they're doing to all of out property. And at the same time there were—people were having problems with calves being born deformed and she made the connection immediately. Th—I—there were women having miscarriages, my grand-mother again made the connection immediately, she blamed everything on the plants. It—but nobody else, I think most of the other people didn't think that there was a connection. And as I said, you know, that this is modernization and they would have arguments, you know, well did you complain when they brought electricity out here? Did
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you complain when they brought the sewer lines out here? And she goes no, those were good things. She goes, but this is not a good thing. We're not really getting anything out of all these plants being here. And I would listen to these arguments and I was very strongly influenced by my grandmother and my grandfather who was a minister in that little community. And then fast forward to the time when the environmental justice movements started, probably about fourteen, fifteen years ago and it was the same issue. And this area is really the—maybe not the eastern most extremity, but one of the eastern most extremities of cancer alley which runs all the way through to Texas and it's just strung with chemical plants who have had next to no controls. And I remember my grandmother talking about, you know, the influ—you know, how bad these plants were. And it's really true. And there were—you know, nobody cared about the—the farms that were there, about the people that were there. Well that's just one line from my childhood
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to now that was an influence. Generally, I've always loved nature, as I said I used to go hunting and fishing with my dad all the time. I always loved to outside just running around and just appreciated how—how—how both beautiful and how necessary it was for people to have a connection, I think, to the land. At the same I'm nowhere near being a luddite, I mean I—I really—I've always thought that technology was neat. One of my first heroes I remember when I was maybe four or five was Uri Gagarin who was the first man in space, which got me in no end of trouble because at the time this was like the height of the Cold War and y—it wasn't really cool to have a hero who was Russian at the time, but, you know, that—I didn't really understand the Cold War, but I did understand going to space, which was totally cool to me. Then I—you know thank
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goodness John Glen went up so I could have a hero who was a little more red, white and blue. But I—I thought that the whole idea of us developing technology was so neat, you know, space exploration, that kind of a line that that follows is understanding that technology can really help us a lot if it's controlled. But then also watching how technology can just spin out of control and as I was growing up, you know, the enviro—move—the environmental movement was also kind of starting. I he—would hear about these things as a kid and you could see there were good things and there were bad things about technology. And I think as I was growing up, I don't know if it was because people told me, I don't really remember, but I really did start developing a sense for there being good technology and bad technology, but at the same time having both friends and adults who were maybe a little more luddite and, you know, were thinking that
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technology was just bad. But that's something that's always stayed in the back of my head and I identify it now because I have a lot of friends who are environmental advocates who think to cribe a lot of the modern things that we have, a lot of the technology and often don't distinguish between the good and the bad.
DT: Can you give of some examples of this love/hate relationship of good and bad technology?
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RG: Yeah, yeah genetic engineering is—is a really good example and I'm still sorting through that because there's part of me that sees this as just being such a neat thing, that we have developed our sciences to the extent where we can create life for the most part. We can pick and choose what things are good and what things are bad in an organism and it could have tremendous applications in medicine. It could have tremendous applications in—in making people's lives better, but at the same time, I don't think we know enough about it to do it safely. And I talk to scientists frequently that are involved with developing genetic engineering techniques and they are so blinded by the neatness of this that they don't stop and think that, well, you know, maybe we don't know everything we do know—everything we think we know about this. And this, you know, very similar to the pesticides issue, but in genetic engineering there are so many things
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that can go wrong, wh—you know—the transposing genes from one place to another. Well if you just look at how genes work—I guess the prevailing thought is that they're a neat little package of characteristics and you just move one from one organism to another organism and you move that whole suite of characteristics with it. Well, it's not that simple.

It could just be how the gene is position and not the gene itself that determines a particular characteristic, so you may get this characteristic, but you may be moving a whole bunch of them with it. And the balance in nature is such that—it's very forgiving, I mean you can do a lot of horrible things to nature and it'll rebound, but there are some things that just have totally unintended consequences. And I think in ge—genetic engineering until we're entirely grown up I think we need to leave it alone. I think it's fine for us to experiment, to study, to figure out how these things work, to test it under very, very controlled circumstances, but the consequences can be so horrible and this is
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also since it's—we're dealing with life and life—I—I've always thought that the meaning of life was to create more life, you know, it's a very circular argument and if we genetically engineer something that—that has characteristics that we couldn't have predicted, it's going to want to generate itself. And we're—we could have something that's just a horrible consequence for that that can really disrupt us. And it's not just a matter of what threat are we posing to Bambi, it's what threat are we posing to ourselves. So that's one of those technologies where I have a very, very love/hate relationship with it. You know there's the neatness that look how smart we are, look how capable we are, bit at the same time look at how immature we are and I think somebody's going to have to put the brakes on this.
DT: While we're talking about genetic engineering, I understand you helped to ban drug-producing crops in Texas, which I guess is one of first and only states that's done this?
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RJ: Well, actually we didn't ban it.
DT: Oops, I'm sorry.
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RJ: Yeah, we—we drafted a bill that we got filed in the legislature this last session that would've ban the—the production of non-food substances in food crops and the argument was, is regardless of what you think about whether or not we should be g—genetically engineering food crops to enhance them or to protect the crop, that it's a bad idea to produce other substances that are not intended to be eaten, like drugs, chemicals in food crops because it's inevitable that the gene is going to transfer to other food crops. I mean we've seen that instance with corn where we had corn that was designed to produce a pesticide to protect the corn contaminated other corn crops and right now all of the corn for the most part has some contamination with genetically engined—engineered corn. Well that corn was designed to actually be consumed so the risk to us is maybe not that great, I mean other people may differ as to what the risk was, but for the most part it's not
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that great of a risk. But if you're engineering corn to produce a drug or engineering corn to produce a chemical, an industrial chemical and you contaminate the regular food supply with it that's huge. You've totally destroyed that food and possible endangered the public. So that was the goal of the bill was to prohibit this practice and also…
DT: This was a bill that was introduced, but didn't pass.
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RJ: Right, it was a bill that was introduced, but it didn't pass. And we didn't think it was going to pass. We wanted to get the ball started. We wanted the precedent of the bill having been filed and where it stands right now is I believe that a s—a bill based upon on the bill we filed in Texas, may be filed in other states. I think Vermont might have filed one. We're

working in California to get one filed. And this is an instance where people get it. Largely I think the public is very confused about genetic engineering, they're not sure if it's a good thing or a bad thing. They're a little nervous. I think by and large most people want food labeled that if it's genetically engineered they should know and then they could make the choice as to whether they want to consume it
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or not. And the industry of course is totally against that, I mean their feeling is, is gosh if people knew what this was they wouldn't eat it. Duh! But—but when you tell them that they're—they're genetically engineering regular food crops to produce other substances, people go, that's just ludicrous. You know, what if that got out into the regular food supply. You know, my kids could have, you know, a spermicide in their Cheerios, that's not good, by accident. And we know that quality control in these areas is not perfect. In—in the most stringent programs that we have, and I th—the space program, NASA and the U.S. Submarine Program are probably the programs that had the greatest quality control and we've had some horrible disasters in both programs. They've been great programs, but we have lost two shuttles. We've lost two submarines, two nuclear submarines and that's in the best situations possible with…
DT: You were in the Navy.
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RJ: I was in the Navy. I was in the Nuclear Submarine Program.
DT: Can you tell you a little bit about the best that technology can do in the quality control that might have been an effect there?
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RJ: Yeah, that—that program probably had the best of two worlds in terms of creating a product that could be operated under the safest conditions. One they had a program called Nuclear Sub Safe Level One and it was a zero defect program that was based on NASA's space program. And it's a series of double checks, everything that when into the production of every piece of machinery we—you could track back a bolt that was used to—to screw in something, all the way back to the mine it was produced in. So you knew that, you know, it was the highest quality nickel and iron that when into this. It was inspected at every stage of its development. The people who worked on it, two people had to check to make sure that everything in the process happened and you had to initial it. And then when we operated that machinery in the Navy every time we turned a valve to—to get the boat ready to go somewhere or to start a system or to start the reactor or to
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start a seawater system, two people had to initial that that valve was in the proper position so that you could as to a greatest extent as possible, reduce the human error, but still there were human errors. Sometimes people would—we used to call it pencil whipping, you know, they would just initial it after the fact. That didn't happen very often, because if it were pe—if it was the people that had to go to sea on the boat, you had a great incentive to make sure that the systems were working properly because your life was on the line. And if I saw somebody that was inappropriate they'd hear from me for sure, because that's my butt on the line out there. But in the shipyard if that person wasn't going out to sea on that boat, there wasn't that natural check. But—so in even systems that were designed to be de—zero defect, there were a million human error things that could happen and of course there were equipment problems that could happen. In the sp—

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space shuttle it was an "O" ring—the first one that—that blew up, it was an "O" ring that just would stay in the little groove so it was enough so that there could be a mixture of high oxygen and these fuels to create an explosion. So the point though, is that this is the most well thought out system with controls in it. Well the agricultural systems where genetic engineering is happening have nowhere near that kind of quality control. They are—we know the mistakes are going to happen. It's not a matter of it, it's a matter of when and we've already had three incidences with contamination from genetically engineered plants to produce pharmaceuticals. Now they were caught—well that's the ones we know about, there could have been other ones where—where there was contamination and we just don't know about it. So it is really a disaster waiting to happen. And I think whenever people hear that this technology is being applied in this—in this context, they're—they're quite upset with it.
DT: Can you describe some of the errors that have happened genetically?
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RJ: Yeah, they've all happened in corn, but I guess a li—maybe a year and a half ago was the first one that I was aware of. I believe it was in Iowa and there was a—this one was where there was corn planted to produce a pig vaccine and after they had harvested—they were rotating the crops in that field with corn and soybeans. So after they had harvested the corn crop, they planted soy and then when they harvested the soy there were still remnants from the corn crop there so they harvested some of the genetically engineered corn with the soy. And when they were—I think someone noticed that there was corn trash in the soy silo and they had to condemn that entire soy crop. So that was one way that the contamination can happen. Cross—I think another way was cross-pollenization where a corn crop that was not sufficiently far away. Well the producers of these products in the—in the companies that genetically engineer them say that well we—we've factored in all the things necessary to prevent these things from
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happening, that was before these things happened. And then after, they say okay well we're just going to increase the margins so we'll insure that this couldn't happen again. We won't allow other plants to be—to be planted in this area. We won't ar—allow crop rotation here. We'll increase the buffer zone between this crop of corn and any other crop of corn. We'll increase it from a quarter mile to two miles that'll insure—and then their argument is that well, corn's got really big pollen and it—it gravity pollinates, it's not typically pollinated by—by a—by like birds and—and bees and that, you know, the winds not likely to carry it that far but we know that that's just not true. Even though it's not likely, it is highly possible that a good wind can carry corn pollen pretty far, quite a few miles. So—and, you know, besides all of the natural things that occur, there are a lot of intentional things that can happen. You know, we've gone through a great paranoia
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with terrorism and we do know that terrorism's not just directed toward body count, it's directed also toward economic disruption and I don't think the security is particularly great around these facilities so a person who wanted to disrupt the economy, the ag economy, could intentionally contaminate these fields and it would be very easy to do. So there's just so many things that could go wrong in this area that, you know, we need to hold off and plus in most of the areas we have other ways of producing the same end results. And if

genetic engineering turns out to be a very efficient and possibly safer way of producing these, we have other crops that we can—we can produce these in that are not food crops. We've thought things like duckweed that grow very well and are cheap and if especially if they're done in an enclosed area—and there's still some risks with that, but it's not the same inherent risk that we have with the—the cross contamination of food crops. One of our allies on this, surprisingly, turned out to be the National Food Processors Association. Frito Lay testified in favor of the bill. They were helpful and of
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course their concern—I mean they're concerned for the same reasons we are, that, you know, you ought not to contaminate the food supply. I mean that's kind of a no-brainer. But also they were very concerned because there were other instances of contamination—cross contamination, but it was, as I mentioned before it—it involved things that were intended to be eaten in corn, where the corn—other corn crops were contaminated with the g—genetically engineered corn, that was designed to be eaten, designed to be consumed, but it caused a lot of problems, because products—processed products had to be removed from the shelves, corn tortillas, tortilla chips. And from Frito's perspective and they're one of the largest purchasers and processors of corn products, I mean the name idea of Fritos and Doritos, their belief is is if there was a contamination incident involving one of their products with something that was not intended to be consumed that it would entirely destroy a product line and they're a major employer here in Texas. I
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think if we had of thought through the strategy and had more lead time and we could've gotten processors in each of the major metropolitan areas in Texas to really work the legislators and educate them and let them know that this isn't just about people, this is about money, which is—that's how you to talk to people in the Texas legislature, you know, you can have a body count, they can kind of get over that, but if you start talking about losing money, that's serious business, I think we'd—we'll do better if we can get that organized.
DT: You were saying there is sort of a money and market angle to the discussion about pharmaceuticals and genetically engineered crops, was there any discussion about market response as saying Frito Lay, for example, would not buy corn from particular producers that were using genetically engineered crops? Is there any pressure or leverage there?
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RJ: Yeah, but there's—the—the problem there—and Frito Lay did say that, the—and I want to be careful that I don't misrepresent what Frito Lay position is, they believe that there should be a moratorium on the production of non food substances in food crops, that's exactly our position also. But they'd had no posi—but they're not in favor of any other restrictions on genetic engineering. They believe it's a good thing to use genetic engineering to enhance food crops and to use these technologies to protect food crops from pests like—like a BT corn, where it—where the corn produces a substance that will kill some of its pests. They're fine with that. They don't—they don't endorse labeling, but this is a very—they identify this as a very different thing. This is something that's never intended to be food. And there—they have tried their best to protect themselves with their contracts. I think they have exclusive contracts with growers so that they—the grower has to agree to not use, you know, what ever Frito Lay says they can't use. And
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that grower probably can't also grow these crops. But that's not likely to happen anyway. The—because the—like a pharmaceutical company is going to have an exclusive contract with a grower to produce whatever this is. The problem that Frito can't protect itself from or Frito Lay is the possibility of their—the crops that they have contracted for being contaminated by something somebody else did. And there's just so many opportunities. Plus we have these—these grains like wheat and corn are siloed together or they're transported in such a way where your never sure if the truck that just brought yours might of brought somebody else's. I think they are creating exclusive pipelines for a lot of these products, which in a way is very inefficient from a market perspective and this happened before this issue with the pharmaceutical crops and it was
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because of European markets prohibiting any genetically engineered products from coming in and they wanted a way to guarantee that they're getting GMO free products. So we've had economic pressures to start creating two food systems because the farmers—the American farmers want to get into those markets, they need to, the—there's not sufficient markets here. They've got to get their crops into the international market. And if there are international buyers—if there are buyers in other countries, Japan or Europe, that were—that are really good buyers that won't accept those—those products and will actually inspect to see then they've got a problem. But we—that—wh—which means we've moved from a system where it didn't matter where the thing was produced, because they were all the same and they can go into the same pipeline and come out of
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the pipeline somewhere else and you only need one set of silo's, one transportation system or set of transportations systems and not—not a totally separate system. So there—I mean there are so many problems that are created by these technologies that are not thought out to the extent where they're going to benefit the public at large or benefit the efficiency of the market at large and there are a few people that really profit from this that are driving it and have influenced I think both the Food and Drug Administration and the USDA to not take a careful look at some of these things.
DT: Can you talk about some of the pressure that's pushing for GMO products? We were talking about the inefficiencies of having two parallel systems of food supply, one that is GMO and one that is not. Can you help to understand why there is value to certain companies in having these two different systems that you would think would be very costly?
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RJ: Right, Well it's—it's kind of the follow the money thing and there are so many different players in the market for any product. There's the developer of the technology, the GMO technology, so that would be Mon—Monsanto or one of those types of companies. They're making the investment to develop the technology for this corn that does this thing that corn doesn't ordinarily do. There are also—and the way that they're going to make their money is by selling the technology, by licensing that technology to farmers, by selling the seed that they develop, so they've got to have a whole system of—of distributing that. They've got to make sure that there's going to be a market for the thing that they're producing, so they had an incentive early on before anybody else even understood how this technology worked to try and influence the regulatory process, which they did and they probably—I mean it should be a textbook example of how to

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influence a regulatory body. The went to FDA really early on and I think really convinced FDA that the legal standard that FDA had to use to determine whether or not these technologies could be used, in terms of whether or not they could produce a food, was whether or not the end product was any different than the non GMO product. So let's say it's the flavor savor tomato which was supposed to enhance a tomato so that it was prettier and taste better, except that it tasted like styrofoam, so they looked at the end product and said well we genetically engineered this tomato, but it's essentially the same as a non genetically engineered tomato. The end product is the same, so their argument was, is that they're—it's no different than hybrid technology, where you keep changing—or you just follow the parentage of a tomato and you keep cross-pollinating different varieties of tomato until you arrive at a different tomato. So that was their
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argument and FDA bought it, that there is no appreciable difference between these things. The technology was not the different, the end product is what—is the difference. So the FDA took the stance that they didn't have any regulatory authority for the most part.
DT: Did FDA know that they were also going to be pursuing patents that would declare that these products were distinctive?
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RJ: Yes, a—and that's always been the catch the twenty—two for me is how can you say that these two tomatoes are the same, but at the same time you can be given a patent that says you have to prove that these two tomatoes are different or else you can't patent them. Well that—that didn't turn out to be an intellectual stumbling block for FDA and plus, you know, they're not the patent department. They're two different federal agencies that don't talk to each other so for the patent agency n—nothing that FDA says is relevant to the patent process and nothing that the U.S. Patent Office says is relevant to FDA. And in some respects I mean that's—that's probably right. But in—in all logic it's probably wrong, there is definitely a difference between those two tomatoes. Actually that was the instance where I think they actually got it right. They labeled the tomato, they didn't have to, but they went through a review process. They submitted what they
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were doing to FDA and they labeled the product voluntarily and consumers rejected it. I don't think consumers rejected the tomato because it was genetically engineered; the consumers rejected the tomato because it was a crappy tomato. And that's exactly how—I mean if the market's working the way it's supposed to, that—I think that was how this should have worked. I think they learned something through that though and they didn't want to go through the time and effort of trying to have a product sell itself because they've enhanced the product, so when genetic engineering and this—this turns out to be the—true with a lot of a—things that go through a regulatory process, that the producer is worried that the product won't swim on it's own merit. So they're going to try to sneak it into the rest of the food process without anybody knowing and any advantage, production advantage that this technology gives them, lowering the cost of production, is what gives
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them the economic edge and that if people are eating this for years and years with no bodies dropping because of it, then they can take whatever the next step is. And some of this is about cornering markets for a company like Monsanto. If they per—have the

technology to produce soybean—well actually canola oil is the—is the good example, canola. They have a patent on it and if they can prove to farmers that this is a good way to grow it, then they are going to be the only people selling canola, not just selling canola, but selling whatever the pest control technology it is to control pests there. They sell a seed that's resistant to their herbicide and it's just marketing brilliance. So that—so the benefits are to companies like—who are developing the technology. The next set of beneficiaries are the farmers, to some extent, who, if the technology does what it's supposed to do, they have a competitive edge over other farmers. If the technology is
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that the canola plant or the corn plant is resistant to—to pests then in theory that farmer lower his costs of pest control and he has a competitive advantage over other farmers. So it's an individual benefit to that farmer if the technology works. And that's where really the benefit starts to end, those—those two beneficiaries, because—and then everybody else is paying an externalized cost. Like me the consumer, if there is any risk in the canola or the corn, I'm paying for that corn, but nobody's paying for any added risk to me. Now nobody's necessarily proven that there has been a risk to me, there are some allegations that the crinine gene in—in corn could cause some allergies, but I don't think that's really been conclusively proven yet. But the point is that if there is a harm, that that's an externalized harm, Monsanto doesn't have to pay it. The farmer who produced
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that corn doesn't have to pay, so there's no incentive to create any safety, any control over that. And that's similar to almost all of the environmental threats that we have that are manmade environmental threats. I think it's very similar to pesticides where there are tremendous benefits to the developer of the technology, whether it's Dupont or whoever develops the pesticide, they're selling it and they're making tons of money. The farmer using the technology can increase their yield because they've decreased their—their—the—their losses to pest to the extent that they can increase their yield above the cost above the pest control that they're using, they've got a competitive advantage, well, pretty soon everybody's using it. If there are harms that are caused by this technology, Mon—you know the—Dupont or whoever produced the chemical is generally not having to pay for those harms. They are—typically there could be health harms, there could be total changes in the eco system because of the use, lots of other harms to everybody else.
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But you never—that—that never gets traced back. Our legal system in theory should try to capture some of those externalities, but in reality it—it really hasn't. And some of that's because the law has developed in a lot of these areas to exempt whoever the person down the chain is from harms that are caused by the product later on. Product Liability Law is a good example. If somebody produces a products that's unreasonably dangerous you can sue them and if you can prove that the product was unreasonable dangerous, there's liability, so you capture that externality. You capture the cost that they imposed that they weren't having to pay for. In food production that's just never been the case and I don't think we've had any courts that have ever held that—that that cost would have to be recaptured. So that's—was an inherent problem with pesticide safety from the beginning and they did—they used a thing called a—a—a risk benefit analysis when they
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were registering pesticides, that you could register anything if you could show that the

benefits associated with the use of this pesticide, outweighed the risks. And it was easy to quantify the—the benefits, and actually the cook the books on that because they counted the sales to the manufacturer of the pesticide as a benefit. So—and this—this is true in—in all kinds of—of different areas—regulatory areas where the benefits are easy to quantify, because they're typically dollars. So okay, well there's the sale of the pesticide, then it was the benefit to the farmer of using the pesticide, then it was, well if we had an increased yield it was the benefit to the—the processors of having an increased yield, that their costs were lowered, because there was a greater supply and then the benefit to the retailer, then the benefit to the consumer because we had a cheaper food supply because these technologies increased the food supply. So economically up the chain you can quantify those benefits all the way up, but you couldn't quantify the risks
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because nobody knew what all of the risks were and even when you can identify some of the risks, how do you quantify harm to a person caused by these pesticides? If the cancer rate increases, it's typically almost impossible to prove that this non-Hodgkin's lymphoma cluster in Iowa can be traced back to, you know, a higher incidence of using this pesticide. So you've just got this inherent problem.
DT: I guess there's a lag often with cancer incidence and it may be mutagenic, teratogenic and…
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RJ: Oh yeah. That's right, I mean it could be generational. I mean it could be multi generational, the impacts. In pesticides is where I think that I really started the first time I worked on—actually it was before I'd ever worked on it. I'd—had learned about Silent Spring not—the—the book Silent Spring, by Rachel Carson not long after it was published and I think—I'm trying—it was in school. I had a teacher who had read the book and talked about it in class. And she was a science teacher and she was telling us about how all things in—in our ecosystem—the entire ecosystem—the globe; were connected. And although, you know, there wasn't really much talk about global—well actually there was no talk about global warming then, this is thirty years ago. She was making arguments that really prepared me to understand how that would work. You know, that there's a balance—balance both, you know, between life forms, between—in
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weather patterns, everything and it's the—kind of the idea, a butterfly flaps it wing in Indonesia and there's a hurricane in Debuque. Now that's probably an exaggeration of that idea, but everything is connected to everything else and it's just typically difficult to measure. But the ideas in Silent Spring that, you know, we could introduce pesticides into the environment and that it has so many unintended consequences that if you—you're killing a whole lot of micro organisms, you're killing a lot of insects that are important, you're throwing the insect balance off, we're killing predator insects at the same time that we're killing pest insects and—and pest is such an arbitrary term. I mean there's not—a pest is just something that we don't want in a place at a particular time, but most of the pesticides that were being used early on were just totally indiscriminate. They just killed everything so it totally blew the ecosystem out of whack. And those
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were—if—if sustained for long enough I think could cause irreparable harm, could totally disrupt the food chain and we saw this. I mean what—what caused the first ban on a

pesticide, or actually restriction because it wasn't a total ban, was DDT an organelle phosphate, because of the affect that it had on eagles and it would—it made the eggshell too thin so that they would break and we almost had the national symbol go extinct because of it. But there were lots of other things like that that were happening because of the indiscriminate use.
DT: Has your work been mostly on pesticide use in the food supply or in schools and parks? What's your focus been?
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RJ: Yeah it's…
DT: We were talking about your role and activities in pesticide advocacy and I was wondering if you could talk a little more about that?
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RJ: Well that was one of the first issues I worked on as an advocate. I'd started working for Consumers Union as an intern when I was going to law school. And Jim Hightower was the Commissioner of Agriculture at that time and he really encouraged any of the public interest advocates, environmental advocates to really work closely with the Department of Agriculture on developing policies to both protect the public, to develop quality control and consumer protections with the development of—of organic foods which was a burgeoning market at the time—this is mid eighties—and also with policies to protect farm workers who were probably the people who were at greatest risk from un—uncontrolled pesticide use. So all these programs are going on at the same time when I'm an intern and I just learned a tremendous amount in a short period of time. Also in our office, in Con—in the Consumer's Union Office, it was much smaller at that
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time, there was a director of the office, there was an administrative staffer, an office manager and there were just interns. So there weren't—there weren't full time professional staff at the time, so the interns typically were law students, worked on the substant of issues for—for the director. And, you know, we were given a lot of freedom to go out there and—and learn and—and develop strategies for moving the issues. So the people that I had relied on to—to try to sh—you know, tell me the ropes at that time were Ken Kramer who was the—the director of the Lone Star Chapter of Sierra Club, Tom "Smitty" Smith who was a legislative staffer at that time for Al Price, it was before they had opened the Public Citizen office here, but he was like a one man force of nature, although he was a legislative staffer he was doing everything else, but he was just a wonderful mentor and very patient with young whippersnappers like me; and Hightower who used the Department of Ag at the time to try to really make changes to protect, you know, both the environment and the public from the—the bad parts of agriculture while promoting the good parts. So anyway that—that was my introduction to—to pesticides
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and the issues that were going on at the time were—I think the first thing I worked on was farm worker safety rules. And there were things that were going on at the time—and this is the mid eighties, I mean you would've thought this was the mid 1880's. Farm workers didn't have access to running water, they were—I think there was a big fight about short-handled hose so it—they—instead of having shovels so that they could stand and weed or long hoes, they were only given the short ones, because the farm owners and operators wanted to make sure they could get down there close where they weren't going to break

the plants, but this was wreaking havoc on, you know, farm worker's backs and it also put them in much closer physical proximity to the plants so that they were inhaling vapors from pesticides. There were—there were no standards on when pesticides were applied and when workers had to be in the fields, so that was one of the other—that—
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actually that was the first major one was the entry restrictions so that the farmers wouldn't be required to be in the field when pesticides were being applied and didn't have to go into the fields until a reasonable period—it was probably not really a reasonable period, but at least some period. So that was one of the first issue I'd—I'd learned about and I also learned about how to convey that information and also learned that just passing the rule or the law is not the end of the story. You've got to actually implement it. You've got to make somebody comply with it so I learned a little bit about how the enforcement program worked and also learned that a lot of farmers were not going to let the enforcement personnel come on their property. I mean there were people with guns, you know, saying you're trespassing on my property. I mean which is totally ludicrous kind of stuff. But it was kind of an eye opener. I kind of held that back in my mind, you know, it's like h—how can you pass a law and pass a set of rules and have
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people totally ignore you? That was—I just didn't know that that could hap—I thought the government said to do it and you had to do it. So we worked on s—you—I'd—I'd left Consumer's Union after I finished law school, went to work for a state agency. I worked for the Youth Commission as a hearings examiner doing juvenile parole revocations, so I got to travel the state, learned a lot more about local government, about, you know, how—how things worked, learned a lot about administrative law and then had the opportunity to come back to Consumer's Union to work on a special project that involved pesticide and it was farm worker protections again. And I was working—then I was working on a joint project between Consumer's Union and the Texas Center for
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Policy Studies. And at the time the Texas Center for Policy Studies was run by Tawny Adams who I think later went on to work for Green Peace. And the project was working on farm worker protections and working on the sunset review of the Texas Department of Agriculture and there was this huge fight brewing between Hightower's side, which was we need strong regulatory programs to protect the public and farm workers and the environment from the bad affects of pesticides and then there was a movement, largely supported by the ag interest and pesticide interest to get pesticide authority as far away from Jim Hightower as possible. So during that sunset review—and ironically the person leading the legisli—slative fight to protect pesticide use was Rick Perry who later ran for ag commissioner against Hightower and—and drove Hightower out of office. But I did work on that sunset review of the Department of Ag. We ultimately were able to save
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pesticide regulatory authority in the Department of Ag and didn't really reduce the program at all. So I mean it was a great success from our perspective, but it was against overwhelming odds. And I—it was also when I learned that—that in this process being right was not enough, having general—if—even if the public was on your side, a majority of people thought you needed to have strong protections, that wasn't enough because it the legislative process so many things were done in back rooms, so we really tried our hardest

to get in those rooms and to try and let people know, let reporters know what was going on from minute to minute and it stopped a lot of—of the—the really bad proposals that were going through. We—we tried to enlist star power in that. We had Willie Nelson come testify and of course that's what made the news. I mean that's unfortunate that you have to do something like that—that—that the straight arguments about the inherent risks of pesticides, about people that were vulnerable, like farm workers, like
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children, that wasn't enough. You had to keep screaming in order to—to just hold off some of the really bad stuff. So that was kind of my introduction to the real politic of—of how the policy worked on this. Right after that—that I guess it was two years after the sunset review of the Department of Agriculture, that happened in 1980—the '89 session, so in the '91 session the Structural Pest Control Board, which is the agency that regulates non-agricultural use, like exterminators and commercial uses of pesticides was going through sunset review and, you know, I still worked on some ag pesticides, but it just seemed like we hit a wall. All the work we were doing on pesticides was defensive. We weren't really moving forward very much. We weren't increasing their protections and we did get some good farm worker protections in place, which was great. There were federal farm worker protection rules that went into place at—at close to the same time we worked on that. I think also simultaneously there was a farm bill moving through and we
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had the chair of the ag committee from South Texas, Kiki De La Garza and although he was very close to the ag interests we were able to persuade him to put some teeth into the farm worker protection. So there—I mean good things, but they were mostly defensive. So we started shifting gears from the ag pest control to the urban pest control. And I kind of thought that it might have been a good issue because people were going to connect with it a little bit better, although people really didn't want roaches in their houses and didn't care what you had to do to get rid of them, at the same time I think there was a growing concern about exposure to these chemicals and people really didn't understand
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them very well. The thing that we did in the Structural Board sunset was to introduce the use pesticides in schools as an issue. And I'd started working—I decided well, I'm going just go talk to the industry. So I went and talk to the exterminators, I talk to their trade association, I started meeting some of the individuals working there and that was a radically different thing. I—we—you know we never went and talked to farmers, for the most part would—they wouldn't talk to us except for the farmer's union, I mean the progressive farmer groups talked to us when we were doing ag stuff, but for the most part there wasn't a bridge and I don't think we made a great effort to go try to meet with farmers. But on the structural issue I did decide I'd talk to exterminators and it was partially because I thought I saw a way to build an alliance with them to move a specific issue and that issue was s—introducing at least some sanity into how pesticides are used in public places and in schools and in government buildings. And the problem there is
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that they were exempt. It—personnel using—doing non commercial pest control application, meaning if it was in a public building or in a apartment complex, something that's, you know, wasn't commercial, they were exempt for the most part if they were using it on their own property. And the pest control companies weren't getting that business

because the school maintenance people were who was using the pesticides and so my argument to them was look I—I—you know, my specific interest is in making sure that qualified people are using these pesticides and in getting the most dangerous pesticides away from kids because—and then that was the—that was around the time of Alar where one of the arguments was, is that pesticides have a disproportionately bad impact on children, both physiologically because children are at that developmental stage where they're more susceptible to harm from these chemicals and also because of ha—kid's habits, you know, they're crawling around, they're sticking stuff in their mouths so their—their exposure rate's are probably much greater. And that seemed to have been resonating with the public. But the other side was the economic argument that we were making to the industry—the exterminators, that there was huge piece of business that
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they weren't getting and that if we required that people applying pesticides in certain areas, like schools, had to be trained that that—they could start competing for that business. Most of them didn't buy it, but a couple of them did and one person in particular bought that argument, his name was Bob Jenkins, he's passed away now, but he was the owner of ABC Pest Control an I developed a pretty strong relationship with him and he really saw that, yeah, yeah this makes sense, you know we—we can probably make a lot of money contracting for that business. And I think he also saw—while I don't think he was an environmentalist I think he saw that there was a potential because public opinion was starting to move a little bit more against indiscriminate pesticide use and I've—if you noticed there's a company called Chem Lawn—oh, Chem Free, excuse me, Chem Free and that's a subsidiary of ABC. I think that came out of those discussions with—with—with Bob Jenkins. I mean I—I can't take credit for that, I think
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Bob Jenkins' the person that figured it out, bit it was him paying attention to their markets and how their markets might fall into line. Well j—just these discussions really changed how I thought about both forming partnerships to pursue environmental things and also unders—that we really had to do a better job of understanding how the money worked if we were going to try to influence this because what I learned about the farm worker…
DW: Why don't we pick up on the next tape…
[End of Reel 2255]
DT: Reggie we left off earlier talking about your efforts to engage the structural groups including ABC Pest Control and others and that you learned about partnerships and I was wondering if you could explain that?
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RJ: Yeah, it was—the—really the effort to try to find what was in it for them that could get them to—actually our—our goal was to just get them to not oppose us trying to introduce provisions that would require non-commercial pest control applicators to be trained, that was a minimum. And we went one step further, we wanted to try to mandate that schools use integrated pest management and to try to eliminate the most toxic pesticides used in school grounds. So this one—the—the school IPM program was really Public Citizens brain child, they had done a report around that time, I think it was '90 or '91 about pesticides in schools, it was a national report, so Smitty and I—since the Hightower time the—Public Citizen had opened an office here, Smitty became the director and Smitty said, you know, we—we have a model school IPM law that we want to try and stick into this sunset bill for

the structural pest control board. I said, sounds good to me, so we ran with it and I had been—I had started talking to some of the
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exterminators, some of the pest control industry people and they started out very leery of working with us, but as I said I talked to some of the individuals and got some of the individuals bought into the idea that there was something in it for them and the something in it for them was expanding their markets that they might be able to start getting contracts with schools, getting contracts with local governments to provide the pest control because otherwise the local government was going to have to get their personnel licensed. And at that time it was horrible what was going on in some of these places, I mean it was the—the janitors in a school, were also doing the pest control and they're very much like the general public with that philosophy that if one cup of this is good, then two cups is twice as good, four cups is four times as good and often their math doesn't go beyond four. So we were having some really scary stuff happening in schools. Make a long story short, we had—we got the school IPM bill which required that qualified personnel, trained and licensed people could apply pesticides and that the school had to used integrated pest management and that they had to use the least toxic form of pest control and it also said that children—that they couldn't apply pesticides
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unless children were not going to be on the campus within twelve hours of the application. This is pretty radical stuff at the time and the pest controls companies didn't oppose it except for the twelve hour provision, they didn't like that. But we got it passed. We even got posting required in certain applications. And we got that slipped in as an amendment to the sunset bill, it didn't have to stand on its own and since sunset bills have to pass or the agency goes out of existence, we knew we had a vehicle for it. And the person that actually got—helped us get that in was Bruce Gibson. He was a state rep from the Dallas area. He's now the Chief of Staff for Lieutenant Governor Dewhurst. But he said if the pest control people aren't upset with this, I see no problem with sticking it in the bill and that was totally insider politics. It wasn't so much that we created a big ground swell in the public demanding this, it's that we had some good news articles about some—some bad things that had happened on campuses with pesticide applications and we just worked building the relationships with the pest control industry. That really was different, so radically different than how we had worked on the ag side, that we had developed—I think some lasting relationships with some of the people in the pest control
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industry, didn't mean that they cleaned up their act entirely, but if you fast forward to now, pest control practices—the regular exterminator that comes out to your house are way different than they are now. The pest control practices in schools are much different now. Now it didn't happen over night. Again you pass the law, it took—we passed the law in '91 and as a compromise we s—we agreed that the implementation date would be September 1, 1995 so that was four years which I mean, we were impatient we wanted it to happen overnight, but we knew that this was a huge change in how business was going to be done and in was going to impose a cost on school districts—they were the people that opposed this the strongest and their argument was, is that this is another unfunded mandate that you're going to require schools to do this and you're not giving us any extra money for it. We're going to either have to contract with a pest control company or we're going to have

to send our people to get them educated and licensed, but you know having the environmental community and the consumer community and the pest control industry together was enough to—to roll over the school districts. And so we got the law
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passed. We did advisory committees and work groups to develop the rules after that and we did get the rules eventually written with a lot of other compromises included and then got them—got them passed. And there were a few schools, let's see, Dallas Independent School District, Austin Independent School District and Conroe, that implemented their programs ahead of time, kind of as—as a experiments and their belief was that if they could do this and reduce their exposure to kids and possibly reduce their pesticide expenses—because if you do this stuff right then you're doing mostly prevention, going and doing a lot of building maintenance and things like that that they can—they can bury into their regular maintenance cost if they did it the right way and reduce their cost and the kids' exposure. And those experiments worked fairly well. We did find later on—we decided to go back a few years after it was passed and see if schools had actually implemented the program and that was this report, Pesticide Report Card. We just kind of arbitrarily picked big and small schools, different geographic areas of the state and we
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found a range, you know, we graded "A" to "F" and we found "A" to "F." We found schools that didn't do anything even though the law required it and we found schools that did a very good job. (?) Austin did a very good job, reduced exposure and the—a lot of the—and the schools ranged from having educated their own people to contracting with pest control companies. We didn't see a huge difference based upon whether or not it was a pest control company doing the pest control or whether the school did it. The factors really were how well they kept their records. And if they were keeping up with their records—that they were actually keeping records of what they were doing, we found that that was the biggest determining factor as to whether or not their program was good or not and that some just kept bad records. And so they didn't keep up with the program, but that—well—I f—I feel like that wa—was just a brilliant success and it worked well for everybody. I mean I think we've radically reduced the exposure of—of school
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children to pesticides at that vulnerable age. And although I think even to this date, maybe not every school is up to snuff, they're all doing, you know, a hundred percent better than they were prior to the implementation of the—of the law. That experience with working with the industry kind of informed another pesticide battle that—that I had and this—the—the next battle went back to the ag area. There was a proposal for Texas to start an eradication program for boll weevils. And this whole eradication idea was based on this raging debate in academia that goes back thirty or more years and actually it goes back to a fight at A&M where integrated pest management was developed. And integrated pest management is a pest control technique and it developed really as an economic tool to determine that level where the cost of ad—the additional use of
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pesticides was exceeded by the—the—let me phrase that a different way; it was to try to find the level of pesticide use that was optimum. You could accept a certain amount of pest damage and that if you used more pesticides, you know, you saved a little more crop, but you didn't save any more money, because you already producing as much as you needed to

produce. And there were other ideas about, well, maybe if we rotated crops we could break some of the pests cycle, maybe if we did a couple of other mechanical things, we could lower the cost of pesticides because pesticides are fairly ex—you know they can be very expensive, but the—the—the goal was not to improve environmental protection or to reduce pesticide use because it might harm people later, the goal was to reduce the farmer's cost of pesticide use. Who cares how you get there, that—that's a—that's a good thing. So, but at the same time—so these—these practices were being developed at—at Texas A&M, but at the same time there was this other philosophy
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called TPM, Total Pest Management, only in academia, can you have a war between these two philosophies, but the Total Pest Management Philosophy was that you could totally eliminate a pest and that you would have a—an increase in the cost of pest management temporarily while you were—and I mean it's engaged in war on a species, and they felt that they knew enough about ecology and enough about the species that they figured that they could break the reproduction cycle in a specific species if they developed a tight enough and aggressive enough attack. And this idea kind of comes out of some of the disease control methods and we really had eradicated a couple of diseases, you know, small pox is gone now—well, if you don't count people creating it in laboratories so that they can fight other people with it. It's gone, and there are some other diseases that we have wiped out using this kind of an approach, well the difference
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there is that you're talking micro organisms and not insects and the variables—the higher the life form that you—that you are dealing with the more variables you have to deal with so it's very hard so it's very hard to just on paper figure out, okay if—if boll weevils have this kind of characteristics and have these types of behaviors, if we apply this pesticide at exactly the right time and we get everybody to do it all at the same time, it's like, you know, count down everybody spray right now that we could kill an entire generation of them. So TPM's based on that idea and in theory it probably really would work. In practice, it's never worked before. And we had an experience in Texas earlier on probably in the late '70's early '80's with a eradication program for fire ants where that was the same idea, we're going to nuke all the fire ants at the same time and what they wound up doing was in—spreading fire ants across the entire sp—state and increasing the
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population exponentially. Well, the reason the fire ant eradication program didn't work was that they didn't really understand the biology of fire ants. And, you know, not—not to make the story too long but the reason was that fire ants behave differently than any other kind of ant for the most part. Most ants have one queen, no more than two and they're the—the reproduc—they're—that's how they reproduce, the queens lays the eggs and fire ants have multiple queens, up to three or four hundred queens per—per mound. If you disrupt a fire ant mound, their response to that is to disperse their queens and each queen can start a new colony. So when they tried the eradication program on fire ants they disrupted every mound of fire ants in the state and they wound up with like a three hundred fold increase in the fire ant population, which put population pressure on the fire ants so they had to spread out. So it was—you
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couldn't have created a bigger disaster. So with the experience and knowing how to

disastrous this approach could be, they wanted to launch the boll weevil eradication program. So we got involved with this one, as did a few other environmental groups—Texas Center for Policy Studies got involved, Sierra Club did and our concern was this interim period of the eradication program involves increasing the use of pesticides. And the pesticide of choice was Malathion and organophosphate and its got relatively low mammalian toxicity, so from that perspective, maybe it's not the worst, I mean there are far worse pesticides, it's a bad one though. But the—the reason that it's—was used, it's got pretty good knock down power for a program like this where you're trying to really disrupt one generation, but the other advantage is that it's really, really cheap. So they were going to, you know, do aerial spraying, ground spraying, every kind of spraying time when it was done. The law that got passed on that, we killed the first session that it
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was proposed and we killed it on the basis of arguing the fire ant thing and arguing that, you know, this is just not a very well though out program. There's no way you can eradicate them, you're going to increase pesticide use—and we also argued this was just based on theory and it's—we had found th—a treatise that was done by a professor years before that argued that if you tried to do this massive knock down, that you'd have this thing called secondary pest infestations. And what that basically meant was you're targeting your attack on the boll weevil, but when you go to kill the boll weevil, you're going to kill the predator insects that control all these other pests other than the boll weevil and there are lots of different pests that typically never reach the stage that they cause big economic harm and some people bought it—bought the argument, but most people didn't. They said, oh yeah, that's just science fiction, that's not going to really happen. But enough farmers b—bought that argument that half—about half of the ag
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community—the cotton producing community opposed the—the boll weevil bill. Well, as it turned out that wasn't why they opposed it at all. It was the assessment, because the—the eradication program required that farmers pay into this assessment and it was a mandatory assessment. And you also—the State Department of Ag, or whoever contracted with them got the ability to enter onto their property to apply pesticides and being the good libertarians that they are a lot of these farmers thought not uh, you know, you're not going to have people entering my property without my permission and I'm not paying another tax, so it was a very anti tax situation. Now I had some concerns about trying to take advantage of—of that because the one part of the eradication program that I liked was the part where the ag community as a community in a region had to work together to develop a plan for pest control. Now if you forget the eradication part of this, that we're going to nuke an entire species out of existence, that's not a bad idea because a lot of what increases the cost of pest control is that everybody individually is doing pest
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control on their property without regard to what's happening on the property next to them. If you wanted to have a good integrated pest control management system, it wouldn't be designed just for farmer Jones' plot, it would be designed for the entire Conical Valley Area with a plan that knows what the migration of the pest is, what the population of pest predators might be so that you can—if the predators are increasing their population because the pest population's high you probably don't want to spray at that time, or you want to use something that's specific to the pest and won't harm the predator because

you'll get really good natural pest control and maybe you've got to plant other things in those areas that encourage the pe—the predator population to increase. So I mean it's a very intricate thing, but that there are some scientific answers to it that are good for everybody. So that was one aspect of the program that we liked
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and so we got some amendments the next time the bill was proposed, we got some amendments put in that actually turned out to have language that was totally contrary to an eradication program. We had—we got put into the law that they had to use integrated pest management and one of the guys—one of the scientists at—at A&M says, this is ludicrous, this a Total Pest Management Program, the Total Pest Management and Integrated Pest Management are totally opposite things and yet you're going to put language in here that says you have to use Integrated Pest Management, but we—it flew. We got some protection for bee keepers put into the law. We let the beekeepers know that they were going to be indiscriminate spraying that was going to wipe out their livelihood. Representative Cruzie who's the Representative from Williamson County, who was, you know, one of the movers and shakers over there now, sponsored an
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amendment into the bill to protect the bee keepers. Well, we th—were able to get the beekeeper provision written wide enough so that it protected other people too. So there were a lot of opportunities in there, but the end of that story is that the bill passed and it set up this whole program to eradicate the boll weevil, had some safeguards in there, some things that were pretty innovative safe guards, but what happened the first year after the program was put into effect was this dooms day scenario that we had brought up about secondary pest infestations, it really happened. I mean it was one of those instances where we—you know they always accuse us of being chicken little, that the sky was going to fall and we had made this argument for something that almost was science fiction, but it really did happen. They did the sprays in the valleys and in the St. Angelo area and they had the worst secondary pest infestation almost in history. It wiped out the cotton crop. It cost the farmers tons of money. And they had—everything they could've
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done wrong with the program, they did wrong and they had this—this pest infestation. Well it increased the number of farmers opposing the act and then there was a lawsuit and the program got thrown out, but it got put back in place. But we had developed a lot of relationships with those farmers and the farmers, although their primary objection to the program was the fact that they had to pay an assessment, they had to pay a tax to—to have the program in, that's not what they said. What they said publicly was that this is going to have bad environmental consequences and you're going to be increasing the spraying. And that was significant, it didn't matter if they believed it or not, what mattered was—was that they were saying it. And we had someone like—I don't know if y'all remember Othel Brand? He was—Othel Brand was the mayor McAllen years ago, he was like mayor for life total—really powerful man, really crusty guy. And he had been appointed to—there was a—a this—this regulatory body that got created during the
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TDA, the Texas Department of Agriculture's Sunset and it was over pesticide rules. It really didn't have much authority, but it got created to give Jim Hightower a headache when he was Ag Commissioner and Othel Brand was appointed to this committee. And he got kicked

off the committee because he said in public that, well, you know, they're using a lot of these pesticides and—and you know, you know, something going to kill you anyway, so why are you all upset about pesticide use? It was like—it—this is on the news back and forth and they'd asked him to leave. He's this crusty old man that just said whatever he wanted. He was also a big ag producer. So anyway the reason that I mention him is that when the boll weevil issue was going on, one of the big spokesmen for the farmers opposed to this after this big disaster with this secondary pest infestation was Othel Brand who came out against this and was making all these arguments how this is just so opposed to nature. It was an environmental argument. So in all these different areas we had farmers using the right language and this was having an affect on public—I
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think public education also. So we have all these things going on at the same time that are really changing the landscape. We had a program for school IPM, we had the boll weevil program that turned out to be a disaster and educated people as to, you know, trying to mess with nature too much. And at the same time we have the rise of the organic market and people, you know, liking organic produce. We—we had involvement with the organic standards committee that was created when Hightower was ag commissioner and it created a certification program because at the time there were all these private certifying organizations for organic and they weren't standardized so that you couldn't really—the—the label organic didn't really mean anything and the state of Texas created a s—stamp that certified the process and it's basically the model for how the national organic program works now. But that market had d—has—had been developing and everybody thought it was going to be a niche market and stay a niche
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market, but that happening at the same time as all these other things, I think h—had the effect of changing public attitudes about pesticides and the growth of the organic showed people that yeah, you know, you can produce these things without pesticides and yeah, I kind of—I like this produce, it's high quality, but it—it—of all of the issues I think I've worked on, you know, pesticides is one where I think there really has been a see change both in public attitude and in all of the industries associated with it. Now in organic—I mean it's—it's a multi billion dollar a year industry and we have people who are not, you know, hippies that are major organic producers. It's being done in a very wide scale, of course that's—there's a down with that because part of organic production is not just that we're going to produce these foods without using pesticides, it's we're going to produce them in a way that sustainable for the area that we're—we're growing them in. We're going to improve the soil, we're going to have nature work with us instead of working
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against us as much, so we're going, you know, the—the earth's going to be as good as off as it was before we started doing this. And I think the—the down side of—of the—the radical growth in organics is that we have—some conventional ag processes used to produce organic food, we're still raping and pillaging, we're just doing it without pesticides. But there are some good practices that have—that have gone along with that. And it has probably been the biggest influence on public attitude of pesticide use, because I think the public sees the growth of the organic industry and that they're getting fruits and vegetables that they really like, they're concerned about their children eating more chemicals and matter of fact as proof of that when the organic standards—that national organic standards

committee tried to change the rules and allow some exemptions to it, there was a huge public backlash. And it was the highest number of responses that the USDA had ever had to a rule making—matter of fact the USDA is not used to the public even knowing it's there other than the fact that they stamp meat. But it was a huge ground swell and I think it was a see change for—for them paying attention to the public.
DT: Were there other incidents in the development of the organic standards either early on or more recently when there was this backlash?
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RJ: Yeah, well in the early '90's when the standards—or late '80's early '90's, that was a very different experience for me of working with a government body and working with industry. It's kind of shooting fish in a barrel in a way, because the organic industry at that time was not like other industries, I mean, these were true believes. I mean these—these were people that went into organics not to become millionaires, they went into organics because they believed in it. They believed in trying to work in harmony with nature. It was—for a lot of the producers it was kind of like a religion and so they were, you know, and I—I was used to going in there and fighting with industry to try to get an inch and there it was like whoa, back off a little guys. We—it doesn't have to be that strong, I mean, it needs to be strong, but you know, y—y—you can't have a program where only three people can actually produce because it's so stringent. I mean this—this needs to be a market where any reasonable person who wants to do the work required to
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comply with the standards should be able to do it. And I think we wound up with—with rules that enable that. But it was a—a very open process when—the first that were done in Texas. And as I said the national standards were very much patterned after the Texas program and—but by the time they were doing the organic standards for the national, the players were—were starting to become different and a lot of the board—the advisory committee, members of the standards board, the industries had become bigger, you know whole foods is a jogger knot now they—they're on there. The ag producers are much larger, they're not the hippies and—and—and committed or, you know, people that are committed to the earth, I would say. I mean a lot of them still are, but it's just a little different. I mean it's—it's much more, this is a business and we need rules that allow the business to—to continue. So the pressure's on the standards were more, what can allow
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us to produce more, faster, rather than what can insure that the standards protect the integrity of the name organic and protect the producers because they have a value added and that value added is dependent upon the public believing that organic produce is different than conventionally grown produce. And that was exactly what the fight was about on the organic standard rules at the federal level and why the public outcry was so great, because the public was basically saying, when I buy organic, I'm expecting this and if you change the rules, what's the difference between organic and non-organic if you're going to allow other things to be used in the production, then, you know, I'm not willing to pay whatever the premium is and I'm not willing for you to call it organic.
DT: Where were some of the places where the industry wanted to hedge a little?
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RJ: Let's see there—one was genetic engineering, was the ability to use genetic engineering techniques and still call it organic. That was a—that was a very big one. And this was a big

argument within the—the organic community. With some right thinking organic producers believing that some of the technologies would really allow them to do some new things without the risks associated with pesticides. And, you know, there's part of me that believes that, unfortunately the—the genetic technology didn't really go that direction, it hasn't been, you know, increasing, you know, crop size and quality, it's been—I think it's been the quick buck technologies. But the public really didn't go for that. Another one was use of fertilizers from…
DT: (inaudible)
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RJ: Yeah, and also the use of—let's see there was a restriction on—oh organic meats—at—at least the start of that could chickens or could organic meat be fed non-organic food? So there were a lot of these different issues, but they all went to the integrity of the end product.
DT: In talking about organic industry and the companies that make it up, you mentioned that the scales been increasing and I guess that's true in a lot of segments of the agricultural industry including some of the livestock businesses…
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RJ: Oh yeah.
DT: I was wondering if you could talk about your experience with CAFOs [Confined Animal Feeding Operations]?
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RJ: Yeah, that—this is where—th—this is the bridge between—like in pesticides our major concern is the direct effect of the use of pesticides on the general public, because they're going to be exposed every different which way am—expose—ambient exposure if you live near an—an agricultural community, the exposure in residues in food. With other ag production the harms are—are—there's a different kind of harm. In the food safety aspect of large ag production is one of the things that we—we looked at heavily, the other one was water quality and particularly in Texas where, you know, we have a shortage of water in most of the areas of the state and places where we don't have a shortage, we're going to have a shortage and we can't afford to contaminate water. It's
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just—it's too precious and there were a number of incidents in the Great Lakes area with—I think the first one that really scared me was curipto speritum that it entered drinking water and this a pathogen that typically lives in mammalian guts and they—arguments were that this was from deer droppings water, but it could of have just as easily had been cows. And we've had some concerns about—especially cattle production—dairy cattle production in the—in the—what is the river just north of Waco?
DT: The Bosque.
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RJ: The Bosque. And the first thing with fecal contamination of water is—is that you'll get algae blooms, because you're putting a whole bunch of nutrients in the water so of course those nutrients make plants grow really fast, but it's a good indication that you've got a lot of manure going into the water and not very many safeguards. Well, if the nutrients are going in the water, the pathogens are going in the water also, so that creates this huge water quality issue. But also the nature of the pathogens in a—in large scale food production has changed. And this is one where there are so many different things related

to—to the food safety that it just becomes dizzying, but the one factor that seems to be the strongest is that if you increase—especially if it's animals that you're raising, if you increase the size of the operation, you're cramming a whole bunch of animals all
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together, that you're going to increase the pathogens that are—that are associated with those animals. And in some respects, I mean, it makes perfect sense. I mean, if you had a mad scientist that wanted to create new diseases, the way you do it is, you'd get a whole bunch of the same species and cram them all together as closely as you can and their going to pass all these germs back and forth. I mean it's what wiped out, you know, more than half of the indigenous population of the United States when Europeans came. You know, they brought new diseases to an area, a lot of these places had high populations, the diseases ran through them quickly and killed a lot of them. If they had had higher populations, it probably would've happened even faster, but on—on a—on a farm, I mean historically we've had small operations, you know, small cow operations, relatively small chicken operations and we've always had some food born pathogens, those have been with us forever because a lot of these things are inherent to—to
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mammals. And, you know, we—you've always had to cook your meat, or you should have always, but what's different now is the nature of the pathogens. Introduce, you know, one of the things that they have to have in large scale ag operations is antibiotic use and—because you cram all these animals together, you create much more stress on the animals, diseases start passing through and they use antibiotics to control these diseases. Well as it turns out, they don't just use antibiotics to control the diseases; they use antibiotics to increase growth. And I—I heard that this—this was determined because there was a plant that—it was a pharmaceutical company that produced antibiotics and their water discharge went into this stream from the antibiotic plant, so there were trace amounts of the antibiotics being discharged from this plant into a natural
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stream and that they were looking out there and they started noticing that the fish that were accumulating around this discharge were just huge. And it turned out that these antibiotics had an impact on the growth rate of these fish, so somebody, like the light bulb went off; what if we started feeding sub therapeutic amounts of this antibiotic to other animals, what will happen? And low and behold it—that they grow really fast and they get big. So you can get a cow to market a lot faster, because you can speed up its growth, it'll put on weight really fast if you're feeding these amounts of antibiotics. So it was a total unintended side affect that somebody discovered would—would work. Well the down side of that is that if you take antibiotics, over time then you're going to start selecting for the micro organisms that you naturally have to be resistant to those antibiotics. I mean it's—it's classic survival of the fittest. Only the ones that are immune
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or resistant to the antibiotic are going to survive and all the other ones are going to die. So over time, of course, you're going to continue selecting for bacteria that's resistant to whatever antibiotic you're using. So we wound up breeding all these different pathogens in—in these animal feeding operations that were resistant to the antibiotics that we have. So we've got all these new bugs that we've created in our food supply system and, you know, th—that if a person contracts these diseases they're going to have to use a different

antibiotic for it. So, now I mean, people are pretty much—pretty much understand this phenomena now, but some of it's, you know, it's a little late. We've already created all these new diseases. So the antibiotics is one aspect of that, but the other one is just the population pressure. And some of these operations have just gotten ridiculous. You know, you have hundreds of thousands of –of chick—well, actually millions of chickens in an operation, you know, hundreds of thousands, tens of thousands, of—of pigs and—
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and cows and especially with an animal like pigs that are a little biologically more to we—to we are, you create some really dangerous situations. Even beyond the antibiotic resistance, having a population together like that does allow for genetic mutation in the pathogens themselves. So we're seeing slightly different pathogens and stronger pathogens, not—and even beyond the antibiotic resistance we're seeing new pathogens. And if you start looking at some of the reports of food born illness that's bearing that out, we're getting more virulent strains of different pathogens that are being bread in these operations and we're having a harder time dealing with them when people get sick because we've restricted the number of antibiotics that can be used to deal with them. Now it's not a closed loop system, it's not just restricted to the food supply, something that we've been learning now is that people that are in agricultural areas are now
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contracting some of these pathogens, just from being in the area because the background level of these bacteria—and almost all these bacteria that we find in animal guts are things that are naturally occurring in the soil—well originally they were naturally occurring. What we've changed is by introducing them into a large population, of course, we—they're mutating and the—the more virulent strains are the ones that seem to survive better and then of course with the application of antibiotics we're selecting for resistance, but these don't just stay in the animals. The animals, defecate and the manure contains these pathogens, which are going back into the earth. They're either going in water, or they're being applied to land and so we've reintroduced these with the other natural pathogens, so we've got resistant and more virulent pathogens then they were when they were naturally occurring. Now we've evolved—as humans we've evolved in the same eco system as these natural pathogens and if we eat dirt we're—we can get sick. We don't usually die from eating dirt and it's—a matter of fact we've found that it's
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problem a good thing for our children to be exposed to a little dirt, because they're ingesting some of the bad pathogens, but you've got all these good pathogens in you gut that are fighting with the bad pathogens and your immune system is fighting with them. If you start changing the mix of those pathogens that are naturally occurring, your gut pathogens can't really keep up with them. So we're introducing this whole new pathogen load that—that can have disastrous consequences for us and for other mammalian species, actually it goes beyond mammalian species, depending on the pathogen, because some, like, salmonella, affect birds and affect reptiles. We're—we're doing some other things even beyond agriculture that—that affect this pathogen mutation and—and increase in virulency and that's that we're all—given travel, the world's become a lot smaller and so the pathogens that naturally incur in let's say, Thailand, and the—the
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flora and fauna and the gut flora and fauna of a human in Thailand has evolved to deal with

the pathogens that are in the dirt in Thailand. Well you take a Thai and bring him over to Texas and if they eat dirt in Texas, they're going to get sick. Where as if they ate dirt in Thailand, they might not, same thing. You know, that's—that's the—you go to Mexico and drink the water, you get sick, it's because your gut's not used to the pathogens in Mexico, well it probably is now, because the back and forth is so great. But we've—we've got all these pathogens from all these different places in the world. Now in the long run, maybe that's not that bad of a thing, because over time we may develop
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a—a—a more varied soup in our guts that can deal with a wider range of pathogens, but that's—we're talking a benefit over maybe ten thousand years, not a benefit over a lifetime. It's a bad thing over a lifetime. We're also bringing—the—there's an exotic pet trade that's going on, same thing we're bringing all these different pathogens and introducing them into the mix. Well these things are winding up in the food supply because we're introducing pathogens into the areas where these cows graze. And then you add a new pathogen to this mad scientist laboratory that are these, you know, animal factories and you've just introduced, you know, a whole new increasingly virulent bad thing. Now add to that one more thing. I get sick. I got to the hospital. We've got a new breeding ground for more virulent strains of pathogens in a hospital because of the rampant antibiotic use in the hospital that sometimes is good, sometimes is bad. Bad hospital procedure sometimes where people are getting infections in hospitals, they're
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typically getting more virulent strains of pathogens in that hospital for the same reason that we're getting more virulent strains in an animal factory. You've got a bunch of people in an area, you're using lots of antibiotics so you're selecting for resistant strains, strains that are just resistant to antibiotics, but resistant to other anti microbials, so we've got some strains of staff that we can't figure out how to kill right now. Those are not just staying in the hospital though, I leave the hospital with that pathogen, I spread that pathogen somewhere else that pathogen also makes its way into the ground, into the soil, it make its way into a cow. I mean it's almost Rube Goldberg, but it's a system we are exacerbating quickly and there's—I think people are getting it now there a big stro—there's a very strong movement and lots of people in the medical community that are getting it and trying to intervene at least in the use of antibiotics exacerbating this, but there doesn't seem to be any one entity that's grasping the entire picture an developing a
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plan to do something about it. This scares me far more than pesticides scared, plus I think we're winning the pesticide battle. We're phasing out the worst pesticides, the practices are changing, public attitudes are changing, industry is changing. In the food production and this whole cycle of making more virulent pathogens, I don't see us getting a handle on it.
DW: Twelve minute remaining.
DT: Okay, this might be a good chance to try and explain, you know, you've taken a lot of time to try and teach us about the complex relationships among the chemical in pesticides or the pathogens and the food supply, how do you boil down these very complex issues and problems into the sound barks, I think as somebody called it, that you often have in the media?
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RJ: Well, I th—translating these issues is—is often very difficult, but at the core almost all

these issues involve something that's—that's fairly basic and one of them is, whoever's making money off of this activity, if it's a big factory farm, do they have a right to make everybody else sick and they're not paying for it? So I mean that's—there's a basic element of either fairness, of logic and that's what you've got to distill from each of these issues in order to resonate with the public. Unfortunately think it's the Chicken Little part of the argument, whatever's the most sensational. Ninety thousand people die from hospital induced industry—injuries each year, well is that the sound bite or is it the—it turns out that that's one of the top ten leading causes of death? Nobody knows that, hospital induced infections. That's the thing that startles people, but maybe it's that hospitals shouldn't be able to hide their mistakes. And these things boil down to
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snappier phrases. The—the problem with that though is that sometimes it's maybe a little more sensational than it is informative and—but that's the medium that we have to deal with. So our challenge is always trying to get the public to pay attention to us at the same time, giving them all of the facts. You know, unfortunately with broadcast medium, with newspapers it's often difficult to say that longer explanation after you've said the startling thing, so then you get accused of just being sensational or being a fear monger. I'm hoping that—that with the internet that we can connect to people, get their attention and lay out the proof of—of what we're saying so that we—we maintain our credibility, but that's always been the challenge. I think the environmental community at large has done a tremendous job of both saying the thing that will get the public's attention and backing it up with the facts. And in some of the areas global warming is a good example. The—it—it just make perfect sense. If you've got, you know, a global ecology that's kind of in balance, our atmosphere is in balance and you intentionally do something that
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changes that balance, it's going to have a consequence and you can logically figure out what that consequence is. And then if any—if there's any fact that reinforces the story that you've told that a person can see in their personal experience, it's—it's going to reinforce that—that with them. Now unfortunately with global warming there are lots of things that people experience within their lifetime, and they think, oh yeah, that proves that global warming is happening, that really don't prove that global warming is happening. I—b—global warming is happening, there's no question that that's happening, we can measure CO2, we can see, you know, what CO2 levels were back in the past, but if I ask my next door neighbor who may not know the facts, he does believe that global warming is happening and he believes it's happening because the weather's been so crazy. And I'm not sure that there's a connection. And the challenge for me is always, okay this person is reaching the right conclusion, maybe from the wrong set of facts, do I have a duty to correct their mistake, or do I take advantage of—of their—of
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their mistake, belief to further my—my—my policy objectives? And I—it—it's—it's just a huge fight. I usually err on the side of—of not taking advantage of misinformation. And I think our side, generally, progressives, environmental, consumer advocates should resist that, I mean it's—it's—you can get short term wins, but we need to do our best to maintain our credibility and to try to educate the public because there are huge problems that we have that involve human behavior, human practices, sustainability is—is going to always be a concern. Are we using more resources? Are we using them in a way that is going to, you

know, rob our children of a future? So the way we communicate this stuff is really important, I mean, we can't take advantage of the short hit, but at the same time we can't get anybody's attention if we don't. So it's—it's a dilemma.
DT: You mentioned communication with your neighbor or the public in general, what about communicating with the next generation? What kind of message would you want to pass on to younger people who are coming up and are trying to figure out what they can do to play a role in conservation?
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RJ: Yeah, well I have three kids and my message to them has always been that, you know, the Earth is in a delicate balance and it's not just the Earth, it's the city that you live in is in a delicate balance, your neighbor hood is in a delicate balance, your house is in a delicate balance. And for my kids, I know we spend a lot of time outside and I show them how the ecosystem right in our yard works. They see the benefits of having a natural garden, because they see hummingbirds and, you know, a kid sees a hummingbird, that's a pretty cool thing because they behave differently than—than other things. So that's—that's the thing that I would—my message to most adults would be is that kids are going to have to have some sort of direct observation, some sort of hands on experience so that they get—so that they've got the—they've got—you've made a connection somewhere in their life with nature. That's what it was for me, going on
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hunting trips with my dad, going to my grandparent's farm. All these things were first hand connections so that when I saw facts later on there was something for that fact to connect to. So for kids, I mean I could lecture my kids about global warming, I could lecture them about the big disasters that could happen, but that stuff's not—that's not real and it's not immediate. I could take them to another neighbor's yard and we can sit there for three hours looking for hummingbirds and never see one and I can tell them what's different between their yard and our yard. Well, we've got a lot more flowers in our yard. We don't use pesticides in our yard. We've got like a rotten log laying, you know, in—in the middle of—of some native plants so that we've created an ecosystem that's—that's real friendly for lizards and all this stuff and that's why you see all these things in our yard and that's why you don't see anything but a manicured green lawn over here.
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And my kids like my yard more than they like somebody else's. But it's a hands on thing and they get it. And then when I explain, well if it's something much bigger than our yard? What if it's the whole world and you pull it so far out of whack that hummingbirds can't live there, that such and such can't live there? You're—you're directly affected by that and that, you know, one generation really doesn't have a right to—to—to hog up all the good stuff and—and just leave the next generation to it's own devices. Now my kids are probably going to interpret that as hatred against the generation that spoiled everything else, but they do interpret that as a need to do something to stop some of the madness that's going on because there's a lot of cool stuff that they don't want to lose.
DT: Well, thank you is there anything you'd like to add?
RJ: I don't know, probably about six or seven million things, but I can't think of what they might be.
DT: Well, you've told us a lot already, thanks so much.
RJ: Yeah.

[End of Reel 2256]
[End of interview with Reggie James]