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Interviewer: I

Marjory Stoneman Douglas: MSD

[46:36]

MSD: The squirrel is in the dish? Yes. Oh, yes. Yes, he comes. He's welcome. Yeah, good. Resident squirrel. Oh, yes. Yes. The blue Jays and the squirrels and the red birds. It didn't do that. The blue jays scare off the birds. They signal when they scream that there's food, all the other birds come running in. The blue jays have to take the, say it like a sunflower seed somewhere else and I can't open so that when it flies off with one that gives the other birds.

I: you're, right, we have a blue jay that comes into our backyard. Takes the dry cat food. Takes one of those flies up to a land, cracks it against, eats it. And cats are always amazed to see Bluejay stealing their food and they never, they never lift up off against him.

MSD: No. No. Bluejay is it goes in and out quickly, are local cat Jimmy. He said, Bluejay, the blue jay management scream at him but Jimmy doesn't do anything but just walked him. I want him to come in the house because I don't want him to scare off all the birds, but the Bluejay doesn't seem to mind. I'm sure that Jimmy could never catch him. He's too fat.

MSD: The problems that the Everglades Park has nowadays that were because of the lack of control over Taylor, whether River or Creek or Slough, whatever it is, I never remember its right name, are still evident. If they could control it, they could control more of the water supply into the Park, and might be able to control the fact that much of that agricultural land has been a menace to the Park because the runoffs includes pesticides and things that haven't been so good. But, the Park problem has to be solved, from, with the outpouring of water from the Lake. The engineers have to do that. That's why the Water Management District and the Park have got together on those seven points, and that's why we are really anxious that the engineers would agree with the other points. I don't see why they don't. I must say I'm very impatient with them for not agreeing, I don't know what they're, what they have in mind.

I: You had mentioned going to see the Everglades and you went in a variety of vehicles, um, not just vehicles you...

MSD: Yeah, well actually it wasn't that I, it wasn't my going to see it was that committee that we had brought down the other people. And the dirigible was the first thing they did; they took them up in a dirigible to show them the whole shape of the land and so on. Well, what happened was there was so many people, up in the carrier of the dirigible that there wasn't quite room for everybody and the people that had to be left out were Mr. Coe and me, as I was the youngest then on the committee and Mr. Coe was the secretary, the executive secretary, so of course he was not considered. So he and I were told we had to sit in a little kind of cabin that swung below the main cabin of the dirigible. Down below that, a funny little place with seats for two. So, I didn't mind, I didn't care, I got in. Well, when Mr. Coe got in, somebody came up and put in a

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bucket, and Mr. Coe apologized to me and said, "I'm very sorry, but I always get... I have to have a bucket when I'm up in this kind of thing" and indeed, we went up and it went "uh-ee" and "uh-ee" and it was very much more... You know, more sway in that funny little thing we were in than they had in the cabin. And poor Mr. Coe got very sick to his stomach and had to use the bucket, and you know, we just got down again before I would have had to use it too, because it was a little too much. So I much say, I didn't enjoy the dirigible very much. But everybody else who were up in the big cabin were thrilled, because we went slowly over great flocks of birds, and it didn't scare them off the way a plane would have, which was very important to everyone else but poor Mr. Coe and me.

I: Did you have a more pleasant experience visiting the Everglades under different circumstances?

MSD: Did I what?

I: Did you have a more pleasant experience?

MSD: Oh, many. Oh, very many. I loved it. In the houseboat and we were in boats, and I've been over in planes and out in canoes and all sorts of things ever since and enjoyed in enormously. That was the only one that was a little rugged.

I: What did you love about it?

MSD: About what?

I: Well, about the Everglades?

MSD: Oh, the whole thing, of course. The whole thing was this marvelous expanse of flat green land with its strangeness and its openness and its birds and all that, sure, you love the whole thing. Wonderful. It's utterly unique, you see, there is nothing like it anywhere else in the world. And you get that sense of it up... (coughs) I've flown over it many times and have never ceased to love it.

I: You know, when it was first proposed, uh, as an addition to the National Park System, it was unusual, as I understand, because the other parks were ones that, primarily, had great geological features: mountains, river valleys, what they call the tall trees parks, and yet this park did not then and does not now look like any of those parks.

MSD: Well, of course, that's the beauty of it. It's not the average park; it's the only one of its kind. As far as having geologic features, of course it has plenty of geologic features, only not mountains and waterfalls and woods and all that. But its features are geologic, because it's the geology of the underground structure that makes it. But it is absolutely unique, but it doesn't have that kind of drama that a lot of people like in wilderness landscapes and people will go up the trail and look around and say "well there isn't anything here, what is there to look at?" They're the kind of people that need something dramatic to call their attention to it, but for those

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people who see the beauty in it, the quietness of it and the wonderful silence of it, it is a park that you understand and like better and better. I had a friend, I had friends over from London and we took them out a great deal in the Everglades and they simply loved it. Particularly my favorite place is that Pahayokee Overlook which is down just a little bit below the visitor's center when you first go into the park. It's called the Pahayokee Overlook. Pahayokee was the Indian name for "grassy water," and that was one reason I named the book "River of Grass" because I knew the Indians called it "grassy water." It's up some height, you climb a few stairs to a covered place, and up there I notice when people are there, they're all very quiet because it's the silence that is so wonderful. You hear the wind rustling in the grass, maybe a bird in the distance and you get the sense of the sawgrass and the openness and the island hammocks are out there. It's a most beautiful place. Well we took these English friends of mine around and when they saw that, they sat down and they had, I remember looking over at David, his name was David Dewar, and he had this rapt, ecstatic expression on his face. He really was seeing it the way we did. And coming back, I said, "Well, you know David it's not a dramatic park." "Oh no!" he said "Its not a dramatic park, it's a lyric park." And it is, that quality of great, quiet poetry. It is a poetic park, a lyric park, and not everybody can understand it. And the people that can't understand it, let them go somewhere else. You know, because they don't understand that, that's just too bad for them, not for the rest of the people who do understand it (laughs) but it's wonderful and remarkable in just that way.

I: You knew, obviously you knew Mr. Coe.

MSD: Oh yes.

I: What about um, about that area motivated that man to such a degree?

MSD: Well, because that was the kind of man he was, he was a very great landscape architect. He'd come down here in the boom and stayed because he and his wife liked it. But by that time he didn't have any work he was really very poor, and his wife was ill for several years and died. And all he had was this queer little salary he had working as an executive secretary of the Everglades Park Committee. And he devoted his life to it. He always wore immaculate, seersucker suits that were a little ragged around the cuffs, immaculately clean but a little ragged. He didn't care. And he went out and he walked around in it, he slept out in it, nobody knew it better than he did. It was the whole thing that he felt was so completely unique. He almost felt as though it was his own discovery. But the sad part of it is, there is nothing in the Park that commemorates Ernest F. Coe. I feel very bad about it and I probably should do something about it. We should raise a fund of money to put up a plaque to him, certainly at the visitor's center. Some kind of a monument... of course the whole park is a monument to him, but his name is not anywhere on it and I think it's a great shame, I just don't know what to do about it, I should have... it's my fault, probably for not having done something about it long ago. I wish we could, I wish somebody would get started at making a memorial to Ernest F. Coe. Tall, blue-eyed, so gentle... he had a soft voice and he was so gentle. Such a nice man but he just absolutely dogged about it. Absolutely devoted and determined, he made a religion of it almost. Without him we'd never have such a park, ever.

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I: And was he there at the dedication ceremony?

MSD: Oh yes he was. However, it was very curious, they had a last meeting on the acceptance of the Park by the committee in New York, and Mr. Coe went out with John Pennekamp and the others and it was winter and he had on his seersucker suit. Mr. Coe held out for those three areas that I've spoken of, the coral reef, the Taylor Slough, creek, river, whatever it is, the part of the Big Cypress. And so, they said, "no, we couldn't do that, it would have to be left out." Spessard Holland and everybody said they couldn't, and Mrs. Rowan said they couldn't. But, when it came to the vote, Mr. Coe voted against the whole thing and he got up and left and went out into the cold weather and John Pennekamp had to rush after him and put him in a taxi and get him back to Miami before he froze to death, and he never had anything to do with it after that. Although it was, when it was dedicated, John Pennekamp made him come and sit on the platform with Truman. And Truman shook hands with him and praised him and all that, and Mr. Coe lived for a couple of years after that. But I think really in his heart that he was glad that it was established, I can't believe that he wasn't. But he was so rabid on the whole park, and of course he was right. But, at the same time, it is quite likely that we couldn't have gotten the park without him. But anyway, he should be remembered, because without him we wouldn't have had it.

I: You mentioned several times the importance of water to Everglades National Park and...

MSD: Well...

I: And that's...

MSD: 'Course it's enormously important to the Park as I say, it was cut off before it was born, practically. Then some years later when it wasn't getting enough water, Bill Baggs of *The News* and Mr. Knight of *The Herald* went up to Washington and saw President Johnson about the need of the Park for water, and Johnson called in the Secretary of Defense and the Secretary of the Interior and said "now you two men have got to get together on this. The Corps is denying the Park water, and the Park is partly the property of the Department of the Interior, and you two have got to get together." So, a contract was signed between the Corps and the Park, which said that [it] would be given, I forgot how many gallons of water, when the Corps had it. But since the Corps has never been particularly interested in the Park. And its been a problem ever since. Of course, once and a while when the Water Management District dumps out too much water from the number two and number three conservancy basin, the Park suddenly gets more water than it wants or should have at that time of year. The rest of the time it could be too dry, but on the whole, the Park has to be considered with the whole problem. And it should be considered, the Governor will have to consider all of that as part of the problem.

I: Can you describe how the living system in the Park relies on water supply? What is the interaction between the water and the animals and the plant communities?

MSD: Well, if you don't have water they won't live: it's very simple. Same reaction there is with anybody; if you don't have water, you'll die. So they don't get water enough in the Park,

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which is a wetlands park. In the first place, if it doesn't get water enough, it dries, and it has been drying. And the melaleuca and the Brazilian pepper have been coming in, even down where the mangroves should be; it would be changing the whole nature of the Park. And of course the animals and the birds have to have water, you've gotta have water. So it's ridiculous that the water should not be sent down to the Park, and instead what they've been doing is dumping the water out down the Caloosahatchee and down the St. Lucie out to sea. Getting rid of it from the Okeechobee Basin without any consideration at all. Of course it is a problem when there is too much water to know what to do with it, but they haven't considered it properly. They haven't gotten together. This attempt on the part of Governor Graham to get the heads of the state departments together is the first time people have come together to consider the whole Everglades, and it's got to be a continuing process. And I, before, they could work with the federal government, even. I applaud heartily the Governor's effort to get going with some conferences on what must be done, not only to save the Park, but the whole system.

I: This brings up a theme of all the years when there was great opposition to returning or maintaining the natural system, or returning the system to some semblance of the natural system, with time with the years when the drainage system was put into place and then when that wasn't effective for controlling flooding there was more and more build. And that brings us up the jetport controversy also. I think between the time... what I'd like for you talk about for us is...

MSD: (interrupting) Well, there wasn't, there wasn't any, well I wouldn't say opposition to the business of having the waterflow correct; they have their system. There wasn't so much opposition, it was the developing people, it was the developers and people who wanted to go in and develop. The parks should be reserved to the proper use of the system. There was no active opposition; it was active intrusion of commercial interests into the area with not enough people who were for the proper handling of the Everglades system. There weren't enough people to be heard, to make themselves heard. That's why it has been so important to get people to understand the whole nature of the Kissimmee-Okeechobee-Everglades basin. We are now having better and better support all the time, but actually at the time in '69 and '70 after the engineers had put in that canal down the Kissimmee River. Then we had the Miami airport, the Port Authority trying to establish a jet port down just north of the Tamiami Trail that would have been on the edge of the Big Cypress and it would have right in the middle of whatever was left of the sheetflow. That's when the opposition developed; a man named Joe Browder who represented the National Audubon Society, was the one who began to oppose the jetport two years after they had begun to buy out the land. He heard about it, and I know he came to me and said he needed more organized support and that's when I started the Friends of the Everglades to give him support to get rid of the jetport. And Joe Browder himself with what support people could give him, suddenly Joe Browder himself got rid of the jetport. And the consequence, we made the federal government buy up some of that land of the Big Cypress as a water preserve and got the State to buy up an additional lot of land as a buffer state. That is why we have any state control at all of the Big Cypress, but of course we couldn't and what's been the trouble in the Big Cypress is that we could not buy, we did not have money enough to buy the mineral rights, and the oil people got in and bought the mineral rights, that is why the oil people have been in the Big Cypress, although they don't get a very good grade. The first oil they got from the Big Cypress, was no better than the number two, that came in the number two, Sunniland oil

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well on the Immokalee road. The oil is so thick and crude, it's got so much sulfur in it that its not much better than liquid asphalt, and the expenses of refining it are very great. But the engineer, the oil people went on and have since developed at Raccoon Point oil field, where they've been getting more than what they did at the other place, which is about 100 barrels a day, which is nothing. They've been getting more than that, but I don't think they're getting very much better oil than what they've always been getting. Why they should want to get it at all, with the glut of oil there is and the expense of refining it, I don't see, I don't see why they don't leave it in the ground at least, and not try to get it out. So the oil people have complicated our conservation of the Big Cypress, they've complicated it enormously.

MSD: Also, the hunters were in there, have complicated enormously and now, of course, our, my own great concern, my own great concern, in the panther in the big cypress, which is the most, the largest habitat of the existing panther that we have. Our state animal of which is official count is only about 20 and which have been, whose habitat is being overrun, not only by the oil people but by the people who go in there for the deer hunting. We had to allow an eleven-mile road called the Southern Road to the Airfield, but they have been able to keep the hunting people from using it. But they haven't, the Everglades park that controls the Big Cypress have had to allow four crossing points for hunters who come in on forty-one, and there are four places where they are allowed to cross the road, although they are not allowed on the road. I'm very anxious to see hunting, to see deer hunting, better controlled in the Big Cypress. I would be glad to see no hunting there at all, because we'll never preserve the panther as we should until we get rid of so many hunters, whether they shoot the panther or not. It's very illegal. They're an endangered species, protected; they're supposed to be protected, by the federal government. And I am not aware that the panther are being shot particularly because there is a very heavy fine, jail terms and all that, and I don't know what anybody shoots a panther for, I don't know what they'd do with the dead body that wouldn't get them arrested. So, that may be under better control, but I don't like what they're doing about the panther habitat. I think it should be left for the panther. I think there should be any oil drilling there or any hunting there, I think it should be left for the panther. The, I don't like... either the state of Florida has had a program of which Colonel Brantley of the fish and game commission have gotten money to study the panther, and the way they study it, I think, is nuts! They chase the panther with dogs, chase him up a tree; they shoot him with a hypodermic that anesthetizes him. He drops off the tree supposedly into a net. Sometimes the net isn't there and he falls off and breaks bones. They put a collar on him that has batteries and a beeper and then they let the panther go, so then... I don't know how much that part of it costs, but I know it's a lot. Then they have a helicopter for a week in each month that flies over the Big Cypress, and they get the beeps from the panther's collars and know where the panther are. Well, all that costs an awful lot of money, and I don't believe they get any more information about the panther than about that. I've been trying to get a report from Colonel Brantley as to what they've learned about the panther, and I'm trying to get it. I hope I can. But I don't believe they've learned very much. There are people who are raising the Western panther, which is very near to our kind of panther. There are people who are raising panthers in the area that know more about panthers, I'm perfectly certain, than the men who put the collars on them. In putting the collar on them, they have to acknowledge that they've killed one panther, and I think they've killed another panther and that a third has either disappeared with the collar on it or was drown with the collar on it. To my mind there is another death that

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Colonel Brantley denies but I can't help it; I believe it. I believe there has been three: one killed that they'll acknowledge, one killed that they won't acknowledge and one that has either disappeared or drown with the collar on it. I think that that is a very stupid program. Of course, I've already expressed myself to poor Colonel Brantley on the subject. But the program is discontinued since the beginning of May; I figured it will be resumed again in January. Well we now, thanks to Senator Neil of Bradenton, we now have a bill passed through the Florida senate and the House of Representatives with an appropriation for a committee to study the Florida panther, also. And I hope that committee will be effective in proving that the collaring program is a bad one. Which I believe it is, I think that anybody who knows about panthers, knows that a panther with a collar on it is not the same thing as a panther without a collar on it. It's a wild animal, and it's a cat and a sensitive cat, and we believe that the collar is bad for it, and I don't see why it isn't. I think they are going to have a hard time proving that it's not bad for it. Anybody who knows anything about the big cats knows that they are, their breeding habits, their habitats and all they, they're very sensitive to all kinds of conditions. So anyway, that's the situation as it is now. And you see how complicated it all is.

MSD: But we are facing it, we've got to face it, we've got to understand it, we've got to do the best we can. There's another situation that isn't anybody's fault, particularly nowadays, that's a very bad situation, and that is that the melaleuca and the schinus terebinthifolius or Brazilian pepper. Both of which were introduced way back, just about seventy years ago on the west coast by Dr Neiling and on the east coast by Dr. Gifford of Coconut Grove. Those trees were something that was introduced that would grow in Florida that would be an advantage... They have taken over as absolute pests. Melaleuca is the worst, the Brazilian pepper is the next and the Australian pine is the third. They all came from Australia, but they didn't any enemies, so they have grown and prospered and they are taking over whole tracts of wild South Florida land. The melaleuca is coming into Big Cypress at a great rate and can take over the whole thing. When the melaleuca takes over, nothing can grow but melaleuca. It drives out all the native trees the animals can't live in it, and more than that it's very hard to eradicate. But the Friends of the Everglades are inaugurating a program, by which we are trying to find out what can kill them, how they can be killed. We know how to kill them individually and in our backyards, and we must begin a program getting rid... you don't have to have a permit for cutting down a melaleuca or a Brazilian pepper in your backyard. You have to have a permit when it's on the street, but it doesn't cost any money, you get it from the city, or get from the county. You get a permit, but it doesn't cost anything to take down a melaleuca or a schinus or an Australian pine on the street. But in your backyard you can take them down without any permits whatsoever (glitch, resumes) any permits for taking down melaleuca, schinus and Brazilian pepper and Australian pine in your yards, but you do have to have permits for taking them down in the street, but those permits don't cost anything. And people better begin taking them down, because they are very bad trees, and particularly the melaleuca spreads like mad. Schinus is spread by the birds, especially the robins from the North, but that's just about the only excuse for them being because they do feed the birds, but we've got plenty of food for them without that, but the melaleuca has no excuse whatsoever, and it must be... when its cut down the truck must be sprayed or covered with herbicide to kill the shoots that would come up from the roots. And if you see the little trees coming up from the spread of the seeds, they can be either burned or dug up or mowed down quite easily before they get to any size. That is, here in the city, but out

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in the Big Cypress, if you cut a tree down they'll be thousands more that come up, and that is our great problem.

I: How did you come to write your book "Everglades: River of Grass?"

MSD: Well, that was an entirely different thing. That... I had friends... the Rinehart and company, the publishers of New York, who Mr. Stanley Rinehart used to come down here in winter, and I knew him and the editor of the series at the moment was Hervey Allen, who had written his great book Anthony Adverse was down here and they're friends of the Rineharts. The Rineharts... Herbie Allen came in and asked me to write a book about the Miami River for the Rinehart series "Rivers of America." Well I said, "well Herbie, goodness, you can't write a book about the Miami River, it's only... its very little river." But I said hastily if you could get up and show that it was part of a series of rivers, part of the Everglades, then you could do that, so he said, "okay, so you can do that." Well then, as I invested the Everglades, investigated the Everglades and studied it, from the point of view of the water system, that's when I saw that it was not a swamp, but it was a river, because Gerald Parker, who was our great hydrologist, told me. I said, "What's a river?" and he said, "A river is a body of freshwater moving more in one direction than the other. And he gave me a map and I had it on the back of my door where I generally have some kind of a map. And the more I looked at it, I thought, "well, why isn't it a river?" There's the source, there's rainfall in the Kissimmee River and the Okeechobee. There's the east bank, there's the west bank and there's the delta, the Ten Thousands Islands and the Cape Sable country and all that. So, I went back to Mr. Parker and said, "Why isn't it a river?" and I talked to him about it and he said "It is, it is" and I said "Do you think I'd get away with calling it a river of grass?" and he said "yeah, why not?" So, years later I said, "Well Mr. Parker, we got away with calling it the river of grass" and he said "yeah, you know why?" and I said "no, why?" Cause he says its true! It is a river of grass. So I was the one, which was really the only smart thing I did about that book, was to decide that the Everglades was a river, and that has made all the difference in understanding it. So we've been able to understand it better because we understand now that it's a flow of water, as we call it, a sheetflow of water, which must be maintained. So that, and the book came and was kind of an auxiliary to all that.

I: And before that the common perception was that...

MSD: It was swamps.

I: That it was a swamp

MSD: Mysterious swamps that nobody knew anything about. And incidentally, my book was published at the same year that the Everglades National park was dedicated, in '47. So they were going at the same time.

I: And it became an enormously popular book.

MSD: Yes, and I'm happy to state that it's still selling, although its now only in paperback.

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I: What do you think about the book *Everglades: River of Grass* struck a responsive cord in people? Was it just that, for the first time, it was called a river, or was there something else about the Everglades itself or about the book that..."

MSD: Well, I of course, well I don't know. I think it touched their imagination. I know that when it was published Brentano's, you know, that good big bookstore in New York, had both windows filled with it, and they practically sold out everything they had in the store. And the publisher, Reinhart, hadn't realized there'd be such a demand for it, and they sold out long before Christmas and they didn't have anymore, and they couldn't reprint it until January. They only printed about 7,500 and they sold right out before Christmas. And they printed some more later, and they sold out. But they could have sold 10,000, I think. And nobody, (glitch) why you don't know? How can you tell? It's like the theatre; biggest gamble in the world. You don't know what is going to hit people. But people had heard about them, evidently, and people were coming to Florida. I think partly its Florida, because writers, I know a good many writers, or freelance writers, who sell to magazines and things, they say things about Florida will always sell. More than any, and if you try to write something about another state, and it doesn't sell so well. So I think it was something about Florida and people's interest in coming to Florida and all that. Because back in '47, of course, they were coming here very much. Good Lord, this town had... when I first came in 1915 there weren't 5,000 people in this town. By '47 there were thousands, I don't know how many... millions. And that growth, you see, was what I think that interest in Florida and in the Everglades. The Everglades is the one thing they didn't know about. Something like that, I don't know. You can't tell.

I: Well, was there much interest in nature and in...

MSD: Oh there's always been a great deal of interest in that in this country. But the interest in Florida nature was what it was.

I: We were talking before about the natural cycle, the cycle of flood and drought, and that the modifications of that system have changed that cycle to some extent. How has the cycle been changed and what is the significance of those changes to the animals and vegetation?

MSD: Well, I'm sorry, but the cycle hasn't changed. We still have wet and dry cycles. That's inevitable. That's why we're having all this rain; we're in a rainy cycle now. That has not changed. It's the effects of the land part that receives. That's the basis of the cycle; the reception of the cycle, you might say... I'm not phrasing it well. I don't know exactly how to say it. It's the way the land has been shaped in spite of the cycle that has been bad. That is why they have... You see, what they should do is recognize the cycle and act accordingly. Think out what they're going to do to take care of great surplus water at some times and no water at other times. But they've tried to do away, they've tried to correct, change the cycle. You cannot change the cycle. That's the world. You can't change the weather, you know; that's the one thing you cannot do. But they have, they've tried to do it without recognizing the cycle and without adapting to it. They haven't recognized the true nature of the geography of the country, both the weather and the geography and the geology and all that. They've been very stupid

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about it. They have refused to admit that it's important to pay attention to natural cycles, but the cycle itself has not changed.

I: Okay, let me see if I understand this: their changes have tried to even out...

MSD: Exactly. People don't like cycles, they want it all to be alike, and you can't do that. You see, they want it all to be one way. They want it all drained and they want just so much water and always to be the same way. Well, you can't do that. You've got to be, you've got to be adaptable. You've got to adapt your systems to the cycles.

I: I think that what's puzzling me is that there have been some claims that the droughts when they occur seem to be worse then they had been historically.

MSD: Well, I will take it back in one sense. By drying up that land they have decreased the amount of water. So they have increased the extent of the dry cycle. But you'll see by the present rains we've had, it isn't entirely the water from the Everglades that makes the difference. We have water from the west and from the sea. So at times like this in a wet zone, we still get a lot of water. You must understand that it doesn't all come from the Everglades, so it doesn't all dry up. But in the course of time, I don't know now what proportion of rainwater comes from the Everglades. I don't know whether anybody does. But in time, there would be less of that. We would have much less water, so there would be dryer times, and maybe there wouldn't be as much water in the wet times. But, there would still be the cycles. It's very difficult to explain because when you explain a system, you explain one thing, you see. And here we are explaining a fluctuation period. And it's difficult, that's why it's difficult to understand, I suppose.

I: I think you're right.

MSD: And I'm not sure I understand it entirely either.

I: I think it is. I think it's a difficult... It seems simple on its surface.

MSD: Oh yeah, but the more you understand it, the more you see that it's a changing picture. But it changes within limits. The limits are there.

I: What are those limits?

MSD: The limits of the dry... of the extreme dry and the extreme wet. Those are the limits.

I: How have the animals and the...

MSD: Well, the birds have decreased terribly. The birds have decreased enormously for a number of reasons. Probably because there are more dry lands, because the water has been let out in the wrong season. For instance, the water, the wood storks didn't nest at all the last two years because they put the high water down into the entrance to the Everglades National Park where they used to breed at the wrong time, so they couldn't feed their young, the young would

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die, so they haven't nested. But the curious thing that has happened to the wood stork and the wonderful thing; they've gone over to Corkscrew. Do you know where Corkscrew is? Corkscrew is a part of an old cypress swamp that was never logged, and the Audubon Society was able to buy it. So it is primitive cypress swamp, and the wood stork have gone over there. The water is high, but they can manage because they are eating the walking catfish. The walking catfish got into the corkscrew swamp, didn't hurt anything, and now the wood stork are breeding and feeding their young on walking catfish! They'll adapt if there is any possibility of it. They'll adapt if they can. And some of them fly all the way to Okeechobee, pick up fish and fly back again. But the walking catfish is such fun because we could really do without them. So we're very happy about that, and for some reason the roseate spoonbill are making a big comeback, and I don't know why, nobody has been able to tell me why. But many others have been almost lost because of the dryness, the smog, the pesticides, the acid rain, all kinds of things from mankind, from people, from cities.

I: Some species are able to adapt...

MSD: Yes.

I: And other species...

MSD: Yes. You see the birds that we have around here have adapted, like the blue jay, the cardinal, the kingbird. They adapt to local conditions. Well, their needs were not so difficult. And they breed in, they don't, they have individual nests, they don't breed in big rookeries as the wading birds do, which makes them much more vulnerable. All that sort of thing. Because the rookery will attract snakes and rats and all kinds of predators, whereas an individual nest will only have local conditions. There might be rats in the local conditions, there might not be. There might be cats that would keep down the rats that might otherwise get the nestlings. In an area where there are roving cats, there are always more birds because the cats keep down the rats and the rats are the true enemy of the bird. The bird will climb up and get, eat the nestling, but a cat can't do that. These nests are on little boughs where the cats can't climb, and most of these fat city cats, they don't climb trees anyway, but they get the rats on the ground. People don't understand that about cats and birds. The rat is their in-between, and the cat is a great help about that.