

## **TRANSCRIPT**

**INTERVIEWEE:** Michael Robinson

**INTERVIEWER:** David Todd

**DATE:** March 25, 2024

**LOCATION:** Pinos Altos, New Mexico

**SOURCE MEDIA:** M4A, MP3 audio files

**TRANSCRIPTION:** Trint, David Todd

**REEL:** 4200

**FILE:** MexicanWolf\_Robinson\_Michael\_PinosAltosNM\_25March2024\_Reel4200.mp3

**David Todd** [00:00:02] Okay. Good morning. I'm David Todd, and I have the privilege of being on the line with Michael Robinson.

**David Todd** [00:00:09] And with his permission, we plan on recording this interview for research and educational work on behalf of a non-profit group, the Conservation History Association of Texas, and for a book and a website for Texas A&M University Press, and finally for an archive at the Briscoe Center for American History, which is at the University of Texas here in Austin.

**David Todd** [00:00:29] And, I want to stress that he would have all right to use a recording as he sees fit.

**David Todd** [00:00:34] And before we go any further, I want to make sure that that's okay with Mr. Robinson. What do you think?

**Michael Robinson** [00:00:39] Yes, that's great.

**David Todd** [00:00:41] Oh, good. Good. All right, well, let's get started then.

**David Todd** [00:00:43] It is Monday, March 25th, 2024. It's about 10:10 Central Time.

**David Todd** [00:00:50] And my name is David Todd, as I said. I'm representing the Conservation History Association of Texas, and I'm in Austin.

**David Todd** [00:00:57] And we are conducting a remote interview with Michael Robinson, who is based in the Pinos Altos area, outside of Silver City, in New Mexico.

**David Todd** [00:01:07] Mr. Robinson received his bachelor's degree from the University of Texas at Austin and his master's degree in literature from the University of Colorado at Boulder. He works as a Senior Conservation Advocate at the Center for Biological Diversity, where he's worked since the group's origin in 1997. He focuses on the protection and recovery of top predators such as jaguars and Mexican gray wolves. And he wrote an authoritative book on the history of wolves in the United States called "Predatory Bureaucracy: Extermination of Wolves and Transformation of the West". It came out of University Press of Colorado, in 2005.

**David Todd** [00:01:46] Today, we'll be talking about Mr. Robinson's life and career to date, and especially focus on what he can tell us about the Mexican gray wolf, its natural history, its protection, and its restoration.

**David Todd** [00:01:59] So, let's start with a question about your childhood and early years. I'm curious if there were any people or events in that stage of your life that might have influenced your interest in animals?

**Michael Robinson** [00:02:13] I'm not sure that there were, but there were animals who influenced my life. Apparently my very first word was "doggy". And I have had an affinity for canids. As a child, I remember memorizing, from a book, some dozens, or over 100, I don't know, different dog breeds and their appearance. So, I don't know - it's hard to tell where that all came from. But, I've always felt some kind of kinship with animals. And I think we all are kin with animals in a way.

**David Todd** [00:02:55] Do you have a series of dogs? I heard that George Carlin once said that, life is a series of dogs.

**Michael Robinson** [00:03:03] Well, I used to. I no longer do. And I see a lot more wildlife in my backyard now than I no longer have dogs.

**David Todd** [00:03:10] Fair enough.

**David Todd** [00:03:13] So, another place that is often influential and fertile for people's interest is school. And I was wondering if, during your time in grade school or at the University of Texas or the University of Colorado at Boulder, if there might have been teachers or classmates that might have helped introduce and encourage your interest in animals and conservation.

**Michael Robinson** [00:03:34] Well, again, it wasn't really so much people's influences that at least I can recall at this point, in that particular direction. I certainly got it in various pursuits. I will say that the University of Colorado at Boulder, where I was in graduate school for literature, I was trying to draw connections to what I saw as the influence in some literary works of the natural world and how it, perceptions of the natural world, so much so that I became, at least momentarily, the butt of a joke when I started saying something during a seminar in a professor's living room with, I don't know, 8 or 12 other students, and the professor. And someone jumped in and said, "about nature".

**Michael Robinson** [00:04:22] And I'm like, it was probably close to my next word or something like that. And everybody laughed.

**Michael Robinson** [00:04:28] This was in the era before there were environmental studies programs that I was aware of or, you know, an environmental literature association. I forget what it's called now, anything like that.

**Michael Robinson** [00:04:38] So, I had interests from others. I got involved in environmental activism based in large part on just my affinity for nature. And I certainly got encouragement in that, but not so much in academia.

**David Todd** [00:04:55] All right.

**David Todd** [00:04:56] Well, you come from a literate background, and I'm wondering if there are items in the world of media - you know, whether it's books, magazines, TV shows, movies - that might have been influential for you and your interest in conservation and animals.

**Michael Robinson** [00:05:16] I was in a jail cell in suburban Denver a few decades ago after a protest against the development of the San Juan Mountains in southwestern Colorado. There was going to be a ritzy, sprawling development on winter range for wildlife. And I and associates engaged in a protest that landed me for three days in jail. And, of course, I had to check out the jail library. And, I found something I wasn't familiar with, but, really was instrumental. And that was a book by David E. Brown called, actually, now I'm forgetting the title here. Well, it's subtitled, and I should just grab the book right now, but, it was subtitled, "The Making of an Endangered Species", and it's, I think it was called.

**Michael Robinson** [00:06:05] Well, I can't. Let me just grab that book. Would that work?

**David Todd** [00:06:08] Please. Yeah. Go ahead.

**Michael Robinson** [00:06:09] Hang on.

**Michael Robinson** [00:06:10] All right. It was, it's, titled, "The Wolf in the Southwest: The Making of an Endangered Species".

**Michael Robinson** [00:06:16] So, I read that in jail, and it really affected me. It was, you know, a pretty dry tabulation of wolves killed in the southwestern United States, along with explanations of why they were being killed and sort of brief histories, as well as, if you will, brief biographies of some of the last wolves that had been hard to catch.

**Michael Robinson** [00:06:44] And that, as I said, that greatly affected me, and focused my attention on the plight of wolves.

**David Todd** [00:06:56] Okay.

**David Todd** [00:06:58] So, I think you mentioned that you had an early affinity for advocacy and activism and, I gather that you landed early on in the formative days of the Center for Biological Diversity. And I was hoping that you could tell us a little bit about your sort of ground zero experience there, and also the origins of the organization.

**Michael Robinson** [00:07:25] Yes. And I should, slightly correct something you said in the introduction, which is I did land in the early days, but not right at the outset.

**Michael Robinson** [00:07:35] I had founded an organization dedicated to wolf reintroduction in Colorado. And we had (this was in 1991), and the organization had, under my leadership, had been successful in getting a number of local governments to endorse wolf reintroduction in Colorado and a number of county, well, the county governments primarily, but also municipalities and newspapers - also a few newspapers endorsed it. And we'd done tremendous public education.

**Michael Robinson** [00:08:07] And we'd gotten an appropriation through Congress to study the feasibility of wolf reintroduction in Colorado, which ultimately found that Colorado had room for for over a thousand wolves in the western part of the state, which had been ... the U.S. Fish and Wildlife Service, which didn't want to touch wolf reintroduction, had disputed that there was any room for wolves in Colorado before that appropriation and the ensuing study came through.

**Michael Robinson** [00:08:34] And then I found myself at loose ends and, I got a call, from my friend Todd Schulke, who was one of the founders of the Center for Biological Diversity, inviting me, to serve as a grant writer for the organization, a new job. And, I accepted. And I wrote grants for, well, something on the order of a couple of years or a year and a half. And then, I was getting increasingly bored with it, and wanted to become to be an activist once again.

**Michael Robinson** [00:09:10] And I informed the executive director of the organization, Kieran Suckling, that I was, that that's the direction I wanted to go, that at some point in the next year I was going to quit. I didn't know what I was going to do. Maybe I was going to go to law school, maybe something else. And I told them that I would be delighted if my job was changed to an activist job. But of course, I hadn't been hired on that basis and I didn't expect it or anything.

**Michael Robinson** [00:09:34] And, within a week, I got a call from him saying I no longer had to write grants, and I could work on activism. I'd already started going to sort of, because nobody else really wanted to, to meetings of a newly formed entity called the "Jaguar Conservation Team", which actually was very much an anti-jaguar group, but that's a whole other story. So, I was just monitoring that. I was already getting involved in some level of activism.

**Michael Robinson** [00:10:04] And then was able to switch in I think it was late 1999.

**Michael Robinson** [00:10:09] And I mean the organization as a whole, has had tremendous success. It was founded in 1989. It went through a number of name changes. It was "Friends of the Owls". It was the "Wolf Action Group" under which rubric, the organization, along with others, sued the U.S. Fish and Wildlife Service to compel wolf reintroduction into the Southwest, Mexican gray wolf reintroduction. The organization was also the Greater Gila Biodiversity Project and then the Southwest Center for Biological Diversity, and then, its present and I think permanent name, Center for Biological Diversity, as we became a national organization.

**Michael Robinson** [00:10:55] And, the organization's success has been connecting to scientists, as well as to legal professionals, ascertaining the status of declining animals and plants, and learning what they need in order to persist and survive, and then getting them the federal protections they need through, in many cases, petitions to place them on the endangered species list and following up with litigation, and then ultimately, when they do get listed, following up with land management agencies to ensure that their habitat is protected as well.

**Michael Robinson** [00:11:31] And, we've had tremendous policy successes, protected hundreds of different species on the ground, and hundreds of millions of acres of their habitats as well. And have really transformed ... I was going to say transformed landscapes ... but in many cases, what we've done is we've prevented the transformation of landscapes. But in other cases, we've really allowed the restoration and rehabilitation and healing of damaged landscapes as well.

**Michael Robinson** [00:12:02] And I have, my role has been advocating for Mexican gray wolves, for jaguars, and for an assortment of other southwestern species, many of which are much more obscure than the top carnivores, the mammals.

**David Todd** [00:12:20] So, I'd love to hear about the more obscure ones too, but I know your time is not limitless. So, why don't we talk about wolves? And, what was your first experience with a wolf? What was the first time you saw one, particularly one in the wild?

**Michael Robinson** [00:12:39] I had been backpacking in Yellowstone National Park. I think this was in, gosh, I should have looked this up before the interview, but, I want to say it was around 1992 or 1993. It was an eight-day backpack. We chose the location along the boundary trail, the south boundary trail, which, as its name suggests, sort of weaves in and out of the park along the boundary with the Bridger-Teton National Forest. I and my friends chose that location in large part because a wolf had been shot the previous fall in the Bridger-Teton National Forest, within like a quarter-mile of the park boundary.

**Michael Robinson** [00:13:22] And this was when wolves were officially not yet back in the Park, but there was a dead wolf that had been shot by an outfitter, who said that the animal had been with a bunch of coyotes, and he thought it was a coyote or some such story, which has since then become a very common story, unfortunately.

**Michael Robinson** [00:13:42] And we, on the second evening of the hike, as we were, I can't remember if it was the Snake River valley or what river valley, we were coming into a big grassland. My friend and I, we had two friends behind, and I and one other individual were in front, and he saw something moving, and it was clearly a canid. And I said, "Coyote". And a moment later, he said, "No, it's a wolf". Anyway, we traded back and forth the binos he had and sure enough - long legs, just a different, it just didn't look like a coyote.

**Michael Robinson** [00:14:14] And, we camped in that valley that night, and we heard coyotes yipping two or three times during the night. And then the wolf, a wolf, responding. It was, again, very clearly a wolf. We only saw the animal for, I don't know, 15, 30 seconds, maybe, at the most, before it must have sensed us. We were maybe, you know, an eighth of a mile, maybe even a quarter of a mile, away. But, we had a good view of it for a while, then it fled, or took off fairly quickly.

**Michael Robinson** [00:14:46] That was that was my first encounter with a wolf in the wild, and I haven't had that very many.

**David Todd** [00:14:51] It's exciting, sort of titillating.

**Michael Robinson** [00:14:53] Oh, it was great. It was wonderful. Yeah.

**David Todd** [00:14:55] Well, you know, it'd be good to to get an introduction to the life history and the ecological niche of a Mexican wolf. I know that you probably know this vast array of data and details about it, so, maybe just the kind of layman's version, the 101 introduction, would be really helpful.

**Michael Robinson** [00:15:23] Well, and I should say that I'm not a biologist, and you know, I can certainly provide some information. I suspect that the level of information I'm able to provide on the biology is widely familiar to people.

**Michael Robinson** [00:15:33] I'm going to shock every listener by stating that wolves are quadrupeds in the mammal family. Or maybe it's not even a family. Maybe it's a genus. And again, I'm not a biologist.

**Michael Robinson** [00:15:45] They're carnivores. They're cursorial, which is a great word, meaning they run down their prey. They're runners. A word related to "cursory", something that you don't spend much time in one place on, or "cursive" writing, that's sort of...

**Michael Robinson** [00:16:01] Anyway, that's a little bit out of the subject matter, but, they're cursorial predators. They run down their prey, in contrast to, for example, mountain lions, which are very, in large part, ambush, or stalking predators.

**Michael Robinson** [00:16:15] They're family-oriented animals. They have social bonds and they operate within a pack, which is basically an extended family unit.

**Michael Robinson** [00:16:24] They can reproduce at age two. And there's pair-bonding. And wolves, young wolves, one or two or three years old, typically take off from their natal pack and go off to seek their fortunes and most importantly, a mate and a territory of their own.

**Michael Robinson** [00:16:41] And maybe I should just jump into the Mexican gray wolf rate right now and a little bit of its story because, again, I don't think I've really informed your archive readers about much on wolf biology through that little summary there.

**Michael Robinson** [00:16:58] Mexican gray wolves are the smallest and the southernmost of the North American gray wolf subspecies. There's been dispute over the years as to what precisely are the various gray wolf subspecies. It turns out there's not a canonical definition of a species by which you can look at look at wolves and say, "Okay, this neatly divides into these different subspecies along this division line."

**Michael Robinson** [00:17:29] Now, there's all kinds of people who do make those assertions. But there's an element of subjectivity to it.

**Michael Robinson** [00:17:36] Original taxonomists who were working on morphology, on the size of animals, the size of their bones, very subtle differences in, for example, dentition, the teeth, certainly the color of their hide after it's been skinned. They were examining those elements.

**Michael Robinson** [00:18:03] And they came up with over 20 different gray wolf subspecies, I think it was 23 or 24, that they delineated geographically. This is in the 1930s, and it was systematized in the 1940s. And actually, the work was done as far back as the 19th century that went into this.

**Michael Robinson** [00:18:22] And the Mexican gray wolf's range, according to that taxonomic schemata went just barely into southwestern New Mexico, into New Mexico's so-called boot heel, north to where the Gila River comes out of the mountains, the Mogollon mountains in today's Gila National Forest, and southeastern Arizona as well. Basically, in the United States, the sky island mountain ranges, the sky islands being ranges that are like islands in an ocean of desert and, of course, with montane and forested habitat higher up in those sky islands.

**Michael Robinson** [00:19:06] And, the Mexican wolves would roam between the sky islands through the deserts, and had very large ranges because in this arid, you know, desert, Chihuahuan Desert, habitat, the vegetation is sparser, of course, than it is in more well-watered areas. And that means a sparser population of herbivores that the wolves and other carnivores depend on, of course. So, they would have large home ranges and range

throughout, across the border as well. And their range, their historic range, went deep into the Sierra Madres of Mexico.

**Michael Robinson** [00:19:41] And immediately north of the Mexican gray wolf was another putative subspecies called the Mogollon mountain wolf. *Canis lupus mogollonensis* that the Mexican gray wolf is *Canis lupus baileyi*, named after Vernon Bailey, who worked for the predecessor to the U.S. Fish and Wildlife Service - the Bureau of Biological Survey - and at one point, was instrumental in pushing forward a federal wolf extermination program and later had real doubts about that, as I mentioned in my book, "Predatory Bureaucracy: The Extermination of Wolves and the Transformation of the West".

**Michael Robinson** [00:20:19] *Canis lupus baileyi*, as I said, bordered on its north with *Canis lupus mogollonensis*. But there are no more *Canis lupus mogollonensis*, so if they were a subspecies, they're extinct. If they were just a population that was slightly different from the Mexican wolf, well, they're gone too. So, it's a little bit of a theoretical assessment about what they were originally, because they're not there. And likewise, the wolf, the putative subspecies of wolf north of *mogollonensis* was the southern Rocky Mountain wolf in the Colorado Rockies and extending the southern Rocky Mountains in Colorado and extending a little bit into northern New Mexico.

**Michael Robinson** [00:21:04] And it too went extinct. The last one was killed in 1945, in the San Juan Mountains of Colorado by the U.S. Fish and Wildlife Service. And its scientific name is *Canis lupus youngi*, named after Stanley P. Young, who was in charge of the wolf extermination program for the Bureau of Biological Survey in Colorado, killed many wolves himself and supervised the killing of others and later got promoted to national head of predator extermination. That wasn't his title. He held various titles, but that was what he was in charge of. He got a subspecies, or putative subspecies, named after him as well.

**Michael Robinson** [00:21:43] And later, when the U.S. Fish and Wildlife Service reintroduced wolves, faced with this uncertainty of where the wolf, the Mexican wolf's range was, but knowing there were these closely related, if not the same, subspecies close by, they extended the range, the management range, if you will, for the wolves they were reintroducing, which was kind of like saying, "Okay, for the purposes of this reintroduction program, we're going to call the historic range, we're going to extend it."

**Michael Robinson** [00:22:12] They extended it up further north to essentially encompass much of the range of *Canis lupus mogollonensis*, up to Interstate 40, which is the Interstate that goes between Albuquerque and Flagstaff, as an approximation of that. And it has become an actual managerial barrier where the U.S. government doesn't allow the Mexican wolves to roam beyond that.

**Michael Robinson** [00:22:37] So, what was originally sort of an uncertain scientific delineation has become a hard barrier to wolf movements and wolf movements that are really necessary for eventual recovery. But that's a whole other story.

**Michael Robinson** [00:22:52] I probably said enough about the biology and taxonomy for the moment.

**David Todd** [00:22:56] Oh, this is great. This is great. Really. It's a muddy, hazy area for me. And I think you've helped clarify things a lot, so thank you.

**David Todd** [00:23:06] Well, let's jump into this big question of what were some of the major factors in the decline of the wolf in North America?

**Michael Robinson** [00:23:18] Whether there basically is one factor which is human killing. You can divide that out into various taxonomies of killing, whether it's the method of killing, or whether it's the motivation of killing, or the incentive of killing.

**Michael Robinson** [00:23:31] But that is what resulted in wolves losing the vast majority of their range, the overwhelming distribution that they used to have throughout the United States. I mean, they were essentially everywhere from the West Coast to the East Coast, from the border with Mexico to the border with Canada and of course, beyond. They were in Mexico and they were in Canada.

**Michael Robinson** [00:23:57] And, I mean, the story, in outline form, is that as settlement, as European settlement, and eventually, you know, the United States civilization in our period of nationhood, extended itself primarily, of course, from East to West. It was characterized by an unrestrained killing of pretty much every animal that was out there.

**Michael Robinson** [00:24:26] But that is not directly how wolves disappeared, because the easiest animals to kill were the large herbivores, whether it's the bison which were on the East coast, or the elk, which were also in the eastern United States, or deer, or further north, moose, further west, pronghorn, so-called pronghorn antelope, whatever. All these animals could be shot fairly easily. They're pretty visible, pretty easy to see.

**Michael Robinson** [00:24:54] And of course, on a natural basis, their instincts and insofar as they learned how to survive through growing up, they realized, they had understood that another animal is potentially dangerous if it's within a certain range of you and can run you down from within that range. But a rifle is a whole different danger that of course, species, very, very animals were not familiar with that danger. Of course, to a certain point, period of time, some animals did become familiar with that.

**Michael Robinson** [00:25:25] So, there was a very rapid extermination of the herbivores, the ungulates in particular, hoofed mammals, that wolves depended on.

**Michael Robinson** [00:25:34] And so, at the same time, there was a very ready replacement for them, in the blink of an eye, as the large mammals, the large herbivores, were being eliminated. Their replacement was domestic livestock - cattle, sheep, horses, goats, pigs - all kinds of animals that were brought back, with the same lack of sense of limits, the same abandoned, sort of almost, it was certainly a cultural phenomenon. But I think even as an individual experience, people thought that they could get, you know, particularly those going out West to the western United States, that their riches were right around the corner.

**Michael Robinson** [00:26:12] And we're familiar with that phenomenon, with the stereotype of the gold seeker, you know, knee-deep in cold water sluicing for gold and with images of mansions and gold railings and everything else that was going to be just six months to get, once you made it big.

**Michael Robinson** [00:26:34] Well, that's the image of the, the, the miner in Western Americana.



**Michael Robinson** [00:26:39] But really the sentiment applied to a whole civilization, including those who were trying to make a living with livestock. And they placed livestock out on the range with no sense that the range could only support a limited number of grazing animals.

**Michael Robinson** [00:26:58] And of course, the wolves took ready advantage of that.

**Michael Robinson** [00:27:01] And particularly as in the West, which, of course, is more arid in many places, at least the Interior West than along the coast, livestock, just like within Mexican wolf range, that naturally there was a ... the deer and the elk and the like are more dispersed, less dense in their distribution. So, livestock had to be more distributed, simply to get enough forage, enough to graze on. And that makes them inherently more vulnerable to wolves and other carnivores. It's a lot easier to protect a herd of 500 grazing animals, if you can see 4/5 of them from any given vantage point, than if they're strung out over, say, ten miles along a winding stream.

**Michael Robinson** [00:27:52] And in the eastern United States, the response to wolves preying on livestock was bounties that provided a financial incentive to individuals who would go out and kill wolves. And they could prove they killed the wolf by taking a specified portion of the animal, oftentimes a scalp, and turning them into whoever the authority was that was supposed to pay out - the state authority or counties alike.

**Michael Robinson** [00:28:17] And that did eliminate wolves from most of the eastern United States.

**Michael Robinson** [00:28:22] In the western United States, they tried that as well. But both because of the dispersal of the livestock over wide areas and again, a function of aridity, but also of mountains, just the less dense settlement as a whole, that turned out not to be as easy.

**Michael Robinson** [00:28:43] And ultimately, in 1915, because of the failure of the bounty laws, the state-by-state and county-by-county bounty laws, which failed for a number of reasons, the U.S. Congress appropriated \$125,000 to hire salaried hunters whose primary job was to kill wolves, but also other carnivores as they could.

**Michael Robinson** [00:29:10] And they were divided into districts throughout the western United States and assigned to a district. And unlike the bounty hunters, who, you know, they'd get paid if they could make a kill. And if they couldn't make a kill in a certain area, they'd go to where they could. And they would sometimes leave wary wolves that were hard to kill behind where they'd abandoned the effort. And of course, that meant the wolves weren't gone there.

**Michael Robinson** [00:29:38] The federal hunters, in contrast, stayed on the job in the district to which they were assigned until the job was done. Because they were salaried and, you know, they could stay in one area for months if that's how long it took to kill two wolves before those wolves had a chance to have a family and repopulate the area.

**Michael Robinson** [00:30:01] And that proved to be a much more successful technique. Wolves were eliminated from the western United States for the most part, by the mid-1920s, so, within a decade of this program beginning.

**Michael Robinson** [00:30:16] There were still a few of them, for the most part, lone wolves, but some, some pairs into the late 1920s. And they also came across from Canada and from

Mexico into, respectively, the northern portion of the contiguous 48 United States and the southwestern United States. And the U.S. Fish and Wildlife Service, which is what the U.S. Bureau of Biological Survey that was carrying out this program became in 1939 or 1940 (I want to say it was 1940, but I'm not positive off the top of my head), the U.S. Fish and Wildlife Service, continuing this program, stationed a man on the border with Mexico to kill whatever carnivores he could, on, you know, on a sort of ad hoc basis, as-needed basis.

**Michael Robinson** [00:31:04] But then when he, whenever he heard a report of a wolf coming up, crossing the border from Mexico, he would prioritize that, drop whatever else he might have been doing, you know, trying to kill the bobcats or whatever, and focus on killing wolves. And very, very, very few of them, survived for more than a few weeks.

**Michael Robinson** [00:31:24] And, as the government put it at the time, they were trying to stop the re-infestation of the United States with wolves.

**Michael Robinson** [00:31:33] And, in 1950, as part of the U.S. foreign aid program that was very characteristic of the post-World War II era, in which, of course, the United States had saved Europe and the world from Naziism and imperial Japan, and was rebuilding, much of the devastated world through the Marshall Plan and other programs, in 1950, the U.S. began providing U.S. government-produced poison to Mexico, to authorities in Mexico. And the U.S. sent in a U.S. Fish and Wildlife Service trapper/poisoner who had a lot of experience to show people in Mexico, both authorities and just ranchers, individuals, how to use the poison that the U.S. government was providing, how to bait wolves in.

**Michael Robinson** [00:32:23] And that led to the rapid decline of wolves in Mexico - that started in 1950. Fewer wolves - within a very short period of time - very few wolves were crossing over from Mexico into the United States, which was the intent: was to protect livestock owners in the U.S., as well as American ranchers who owned extensive holdings of land and cattle in Mexico.

**Michael Robinson** [00:32:48] But, of course, as I said, it came, you know, it was a foreign aid program and typical of such aid, of such programs, there was both a charitable, if you will, aspect of it, and a self-interested aspect to it. And that was certainly the case in this instance. But, the bottom line is the wolves were rapidly disappearing.

**Michael Robinson** [00:33:10] In 1972, February 8th, 1972, President Richard M. Nixon signed an executive order, and maybe was it even two executive orders, that ended up banning the poisons that the U.S. Fish and Wildlife Service had been using to exterminate wolves and other predators.

**Michael Robinson** [00:33:32] And the same day, he suggested to Congress the passage of a new law, which took a year and a half worth of hearings and modification, but Congress did pass it. And it became the Endangered Species Act, which President Nixon signed on December 28th, 1973. And the goal was, as I think most of your, of our viewers will be very familiar with, the goal was to prevent animals and plants from going extinct.

**Michael Robinson** [00:34:04] And beyond that, and a little mention of the Endangered Species Act, but actually the very first enumerated intention of the law was to conserve the ecosystems upon which endangered species and threatened species depend. I believe that's a verbatim rendering of the first intention of the Endangered Species Act: to conserve the ecosystems.

**Michael Robinson** [00:34:26] But the way one conserves the ecosystems is to conserve the animals and plants that are declining in them, as well as their habitat, as critical habitat, in the Endangered Species Act.

**Michael Robinson** [00:34:37] Be that as it may be, the U.S. Fish and Wildlife Service, which had been engaged in poisoning and trapping, and then hunting of wolves for almost a century, I guess a little over half a century, really, realized there were a few wolves left in Mexico, but they'd done such a great job, there weren't very many of them.

**Michael Robinson** [00:34:56] And they hired one of their former trappers, somebody who had been, intermittently, a U.S. Fish and Wildlife Service employee, and intermittently a private bounty hunter, for many years, to go down into Mexico, into some of his old stomping grounds and capture wolves alive. And between 1977 and 1980, he took multiple trips. He was an American, Roy McBride. He took multiple trips to Mexico to investigate the status of wolves.

**Michael Robinson** [00:35:28] He started off by going to bankers and asking them about the loans that they had made to ranchers, and which ranchers had told the bankers they were having trouble paying because of wolves killing their livestock. And then he went to those ranchers in the vicinity and started looking for wolves.

**Michael Robinson** [00:35:50] And the bottom line, from four years of effort from '77 through 1980, was that he was able to capture a total of six wolves. One died in his trap. The individual was not used to keeping animals alive in the traps. Of the remaining five, four of them were male, and only one of them was female. And she was pretty old. And she was pregnant and she did have a litter of pups. I believe none of them survived, or maybe only one. I can't remember the details.

**Michael Robinson** [00:36:20] But the bottom line was that there were questions as to whether her reproductive years might soon be over, whether she was too old to reproduce. Ultimately, they did manage to get her pregnant. Three of those five, two males and the female, were successfully bred.

**Michael Robinson** [00:36:36] And in addition, there were two other lineages of wolves with uncertain provenance, that had been, the, the U.S. Fish and Wildlife Service was aware of, there were wolves in the Aragon Zoo in Mexico City that derived from, from two wolves that nobody really knew where they came from originally, but they'd been bred for many years and of course, were very inbred, in, in that zoo in Mexico City and separately, with more information on their provenance.

**Michael Robinson** [00:37:13] There was another lineage of wolves that stemmed from two wolves. One of which was captured in Arizona when the animal was essentially courting a ranch dog near the border with Mexico in southern Arizona. This is when all the wolves had been killed. The lone wolves were lonely, and they sometimes would come around dogs and seek companionship. And this wolf had been coming around a ranch dog, and the rancher trapped the wolf and kept it alive as a curiosity. I want to say this is 1959.

**Michael Robinson** [00:37:53] This is all stuff that, you know, if someone's listening to this, whether it's in 2024 or 50 years from now or whenever, you know, this can be looked up.

**Michael Robinson** [00:38:02] But separately, I want to say, in 1959, an American tourist in Mexico had come down on his motorcycle. And somewhere in Mexico, somebody approached and said, "You want to buy a wolf pup?" He said, "Sure." He bought a wolf pup.

**Michael Robinson** [00:38:20] Of course, nobody knows what has happened to the wolf's parents, but probably nothing good.

**Michael Robinson** [00:38:25] And he drove back into the United States with the wolf pup in the saddle bag of his motorcycle. And at some point, when he's back in the U.S., in the Southwest, he's thinking this through, and he realized that he couldn't really do right by this wolf pup. And he took it to the Desert Museum right outside of Tucson.

**Michael Robinson** [00:38:46] In any event, long story short, that animal and the one who was captured courting a ranch dog were bred in captivity. And that's the third lineage of Mexican wolves.

**Michael Robinson** [00:38:59] So, that's two plus two plus three equals seven founding animals.

**Michael Robinson** [00:39:06] Roy McBride, who had trapped those last five animals between 1977 and 1980, estimated that there may be as many as 50 additional wolves in the wild in Mexico. But the U.S. Fish and Wildlife Service didn't get the funding to capture more of them for the captive breeding effort, that was, you know, at the time, in the early 1980s, just getting under way.

**Michael Robinson** [00:39:34] Of course, wolves, as I said, from these other two lineages had been bred previously, not necessarily for conservation purposes, but then in large part as curiosities.

**Michael Robinson** [00:39:43] But in terms of getting more wolves and increasing the genetic diversity, the Reagan administration had no enthusiasm for endangered species conservation and wouldn't provide the funding. And even though Roy McBride had warned that the wolves remaining in Mexico, the up to 50 left, were rapidly disappearing, and the U.S. Fish and Wildlife Service knew that their future in large part might depend on getting more of them for genetic diversity, that didn't happen.

**Michael Robinson** [00:40:14] And, as far as we know, they were eventually, that remnant population was exterminated, and no longer exists.

**Michael Robinson** [00:40:27] Wolves have been reintroduced into Mexico starting in 2011. And that's a very difficult reintroduction, in large part because, there's very little public lands in Mexico. And also, well, obviously, it's a very different society in many respects.

**Michael Robinson** [00:40:47] But there is no elk in Mexico, which turns out to be a very important, and the large part of the food base that wolves are taking advantage of since reintroduction into the southwestern United States. But there's no elk in the Sierra Madres.

**Michael Robinson** [00:41:04] And there is heavy hunting pressure on the deer, which again means that with low densities of deer, wolves have to have large home ranges, and that exposes them to a lot of perils.

**Michael Robinson** [00:41:17] That said, just to get back into the sort of historical sequence. In the late, well, in the 1980s, there was this beginning of a captive breeding program. In 1982, the U.S. Fish and Wildlife Service and its counterpart in Mexico, jointly developed a recovery plan for wolves. And there was involvement by state agencies. The recovery coordinator was Norma Ames, who was with the New Mexico Department of Game and Fish.

**Michael Robinson** [00:41:51] And the recovery plan called for continued captive breeding and then reintroduction of wolves to historic range in the southwestern United States, and/or adjoining areas in Mexico. And the recovery plan stated that the interim goal should be a viable population of at least 100 wolves in the US, and another population in Mexico.

**Michael Robinson** [00:42:28] But the recovery plan also stated, and the the authors of the plan were very clear about this, explicit, that reaching that goal would not constitute recovery. It would not be a point at which the Mexican gray wolf could be taken off of the endangered species list. And they stated that, I mean, this is very much a paraphrase, but that the Mexican wolf was so imperiled, and the forces (and basically enmity of the livestock industry, although they I don't think they put it quite as baldly as that), the forces that had led to its extirpation were still very powerful, and they couldn't foresee the complete removal of the Mexican wolf from the endangered species list.

**Michael Robinson** [00:43:11] They also acknowledged, in that recovery plan, the authors of the plan, that the Endangered Species Act requires recovery plans to have criteria for removing them from the endangered species list. But they said, "We're going to have to do that in a revision of the plan." And they said, "We're going to revise the plan within a few years, just as soon as we get the first reintroduction underway." It was very clear they anticipated that happening, like pronto, you know, a year or two or something like that.

**Michael Robinson** [00:43:37] But politics intervened. And to make a long story short, the U.S. Fish and Wildlife Service didn't want to reintroduce wolves. After all, this is the agency that had spent, you know, decades poisoning and trapping wolves. It was, in large part, it was an agricultural service agency through much of its history. And they saw the livestock industry, the ranchers, as their true clientele.

**Michael Robinson** [00:44:02] But Congress had told them they had a new charge in 1973, which was the opposite of their old charge of exterminating species. Their new charge was to rescue the species. In fact, in some cases, the very same ones they'd spent so much effort bringing to the brink of extinction.

**Michael Robinson** [00:44:17] And there was resistance. And obviously the livestock industry was not very enthusiastic at the prospect, the prospect of bringing back the species that they had marshaled the forces of government to have exterminated.

**Michael Robinson** [00:44:37] Around 1990, the Center for Biological Diversity, I think this was our very first lawsuit, and at the time we were called the "Wolf Action Group". It was comprised of the people who were founding the Center for Biological Diversity. And it was a loose-knit group at the time. Wolf Action Group teamed up with other organizations, such as the Sierra Club, and sued the U.S. Fish and Wildlife Service over the reintroduction.

**Michael Robinson** [00:45:06] Let me back up a little bit and give a little bit more chronological logic and events to make it make sense.

**Michael Robinson** [00:45:14] The U.S. Fish and Wildlife Services, you know, as I said, was reluctant. And at some point in the late 1980s, they contacted the States of Texas, New Mexico and Arizona. And they said, you know, again, very much to paraphrase, 'Hey, we've got this law, the Endangered Species Act, that we've got to enforce. We got wolves, Mexican gray wolves, they're on the endangered species list. We're going to reintroduce them. That's in our recovery plan. Where would you let us do it?'

**Michael Robinson** [00:45:42] Now, as astute viewers of this program will remember, there was a Civil War that ascertained that the federal government has primacy when there's contradictions with the state government on matters. And the federal government had won that war. The North had won that war. And we have a federal system. And the federal Endangered Species Act says, "You shall recover endangered species", not "You shall recover endangered species unless the states that have the endangered species aren't into it." That's not what the law says.

**Michael Robinson** [00:46:15] But nevertheless, the Fish and Wildlife Service essentially abdicated its responsibility and its authority with this question to the three southwestern states. Texas responded by saying, "We have a law that says no, no releases of wolves, so don't do it." And the Fish and Wildlife Service said, "Sorry to bother you. Don't even think about wolves because we're not thinking east of New Mexico anymore." Again, this is my characterization of formal bureaucratic language.

**Michael Robinson** [00:46:43] And, New Mexico said, "Well, we have a spot that might work - White Sands Missile Range." Which, as its name indicates, White Sands, is not a very well-watered area. It's very arid, only ephemeral streams on it. And because of its aridity and lack of water, there's very few deer or javelina, collared peccary, and no elk, that wolves could potentially prey on.

**Michael Robinson** [00:47:14] But it also didn't have livestock. And that's why the New Mexico Game Commission said, "Well, that might work." And they also explicitly said, "Don't even think about putting wolves in the Gila National Forest." Now, why did they name another place? They named the other place because the Gila National Forest was clearly, just without even any studies ascertaining it, to anyone who was familiar with the Southwest, it was the very best habitat remaining for Mexican gray wolves in the southwestern United States, with deer, elk, javelina, huge roadless areas where wolves could potentially escape human persecution.

**Michael Robinson** [00:47:50] And of course, for those who are historically minded, the location 100 years ago, almost 100 years ago, in September 1924, of where pioneering ecologist Aldo Leopold, and at the time U.S. Forest Service employee, had persuaded the Forest Service to set aside land as a so-called primitive area, which we now call "wilderness areas", that was going to be undeveloped and no roads built into it.

**Michael Robinson** [00:48:17] But the success, the potential success of wolves in the Gila National Forest, and the fact that there's livestock there, is what led the Game Commission of New Mexico to say, "Don't even think about putting them there."

**Michael Robinson** [00:48:31] So, they named White Sands Missile Range as "maybe". They weren't going to necessarily oppose it there.

**Michael Robinson** [00:48:37] And then Arizona said to its credit, because they briefly, I believe, is under Governor Bruce Babbitt, they briefly had a game commission that was not controlled entirely by the livestock industry - a historical anomaly, which I don't believe had happened before in Arizona and I don't believe has happened since then in Arizona.

**Michael Robinson** [00:48:59] But there was this brief window of time, and the Arizona Game Department or Game Commission wrote back to the Fish and Wildlife Service saying, we're going to do a study of where wolves might survive, which was incredibly good faith response. I mean, just sort of jaw-dropping good faith, particularly given everything that Arizona Game has done since then to try and sabotage wolf recovery.

**Michael Robinson** [00:49:23] The study ultimately took 2 or 3 years. Ultimately showed that two large areas of the sky islands, in other words, the recognized historic range of the Mexican wolf could be suitable habitat for their return.

**Michael Robinson** [00:49:38] And also, a portion of the Apache National Forest, which is on the Mogollon plateau or the Mogollon rim, many people call it, right, at least closer to where it drops off precipitously, but this high-elevation area would also be good habitat for wolves, notwithstanding, of course, that it had been originally delineated as the historic range of *Canis lupus mogollensis*, the Mogollon mountain wolf and not of *Canis lupus baileyi*, the Mexican gray wolf.

**Michael Robinson** [00:50:07] The U.S. Fish and Wildlife Service, went, before that study result came in from Arizona, they looked at the results and they said, "Okay, Texas is out. Arizona is on hold. White Sands Missile Range seems to be an okay." And then, the Army, which managed White Sands Missile Range, sent a letter to the U.S. Fish and Wildlife Service saying, "Nope, don't do it. This is our place for sending missiles. Don't put wolves here."

**Michael Robinson** [00:50:40] So, Fish and Wildlife Service then put out an announcement saying, "Wolf reintroduction is not going to happen in the near future, or at any time that we know of."

**Michael Robinson** [00:50:48] That's what led the Center for Biological Diversity and our allies to sue the Fish and Wildlife Service under the Endangered Species Act, and the Army, because by that time there was a study out that actually showed there could be a few wolves that could survive in the Missile Range. And so, we sued them because the Endangered Species Act requires all federal agencies to engage in conservation, and which is ultimately a step to lead to recovery of endangered species. And the U.S. Fish and Wildlife Service and the Army, they knew they were on the wrong side of the law.

**Michael Robinson** [00:51:22] The Fish and Wildlife Service settled the lawsuit with an agreement, a settlement agreement, pledging to reintroduce wolves, Mexican gray wolves. And this settlement, I believe, was in 1993. It took another five years. We ended up, the Center for Biological Diversity, had to send them a warning letter because they stopped. They said they were going to do it. They did a lot of planning and then they just stopped. We reminded them of the settlement agreement. They proceeded.

**Michael Robinson** [00:51:53] And wolves were reintroduced in March of 1998 into eastern Arizona in a recovery plan that was extended to include the Gila National Forest of western New Mexico, which is adjoining the Apache National Forest of eastern Arizona. And what the U.S. Fish and Wildlife Service did, and in particular David R. Parsons, who was the Mexican

wolf recovery coordinator, and a conservationist at heart who deeply cared about, and still cares about, the Mexican gray wolf. And he had tremendous opposition within the U.S. Fish and Wildlife Service, his supervisor and people higher up the hierarchy, that didn't want to put wolves where there was potential conflict with livestock.

**Michael Robinson** [00:52:39] And up till the last moment, there was a choice to be made about White Sands Missile Range, which New Mexico had approved, and this other recovery area, partly in Arizona (this other landscape, really, because it wasn't a recovery area yet), partly in Arizona, but tantalizingly close to the Gila National Forest in New Mexico.

**Michael Robinson** [00:53:03] And the U.S. Fish and Wildlife Service, under Parson's direction, delineated in its Environmental Impact Statement two recovery areas. One was the White Sands Missile Range recovery area, or maybe, I think maybe they just called the White Sands Recovery Area. And the other they called the Blue Range Wolf Recovery Area.

**Michael Robinson** [00:53:22] The Blue Range, being a mountain range in the Apache National Forest in eastern Arizona. But the Blue Range Recovery Area was drawn to include a big, well, not a big chunk of New Mexico, but a bigger chunk than in Arizona. In fact, the Apache National Forest, which was in its entirety delineated, or included, in the Blue Range Wolf Recovery Area, was 1.1, is 1.1 million acres approximately. The Gila National Forest, which in its entirety was also included, is 3.3 million acres, three times the size of the Apache National Forest. The total is about 4.4 million acres.

**Michael Robinson** [00:54:01] That was the recovery area and the Environmental Impact Statement said, "We're either going to reintroduce them to one or the other, and if we reintroduce them into one and it's not sufficient for progress to be made, we'll go ahead and consider reintroducing it to the other."

**Michael Robinson** [00:54:17] The Fish and Wildlife Service, as I said: there was tremendous opposition within Fish and Wildlife Service, except for brave Dave Parsons working to get the wolves where he knew they would thrive biologically, which is the Gila National Forest. And he went to a meeting with Bruce Babbitt, who by that time had been appointed as Secretary of the interior, prepared to make the case, but aware that his supervisor, the regional director of the Southwest Region of the U.S. Fish and Wildlife Service, who was also in the meeting, was making the opposite case.

**Michael Robinson** [00:54:56] And in fact, he had buttonholed him at a Christmas party and said, "We're putting those wolves in White Sands, right, Dave?", which is a not very subtle way of weighing the scales without necessarily putting something in writing and something very informal, I think very telling about how agencies take actions that are not necessarily consistent with their responsibilities, in service of, in this case, of the livestock industry, frankly.

**Michael Robinson** [00:55:25] Be that as it may be, as Dave has related the story, (and he would be a great person for an oral history as well), as Dave has related the story: Bruce Babbitt walks into the conference room in Washington, D.C. and immediately says, "We're putting the wolves in the Gila, right?" Or something like that. I wasn't in the room, of course. And Dave, before his supervisor can say anything, says, "Yes, sir."

**Michael Robinson** [00:55:47] And so it happened. And the reintroduction, as I said, began in 1998.



**Michael Robinson** [00:55:54] And wolves were never actually reintroduced into White Sands Missile Range, where they almost certainly would have immediately left the area. And the early regulations that Fish and Wildlife Service set up required the removal, the live catching, of any wolf that did establish a territory wholly outside of whatever recovery area would be chosen, which of course, as I said, was the Blue Range Wolf Recovery Area, including the Apache and the Gila National Forest.

**Michael Robinson** [00:56:23] So, there was a kind of a hard barrier, or semi-permeable: if you were a wolf, you could leave the area, but you can't establish a territory wholly outside of it, or the Fish and Wildlife Service had pledged itself to remove those wolves. And that probably would have been the case, and the fate, of wolves, had they been released into White Sands Missile Range.

**Michael Robinson** [00:56:47] But they were released into the Gila, well, first into the Apache National Forest, and then two years later, through another political battle, we managed to get them released directly in the Gila National Forest as well.

**David Todd** [00:57:04] That's impressive. Wow. What a wonderful historical route you took us on there.

**David Todd** [00:57:12] I have a couple of questions that may help put a little bit of nuance to what you've been talking about. And I'm, you know, sort of parochial here. I'd like to hear you talk a little bit about the situation in Texas, which I think you touched on several times, but maybe we can just go back and try to, you know, put some detail to that.

**David Todd** [00:57:41] So, do you know when the Mexican wolves were pretty much eradicated in Texas?

**Michael Robinson** [00:57:49] The last two were shot in 1970, in I think it's Brewster County (I might have the county name wrong), just north of Big Bend National Park, three years, or a little over three years before the Endangered Species Act became a law.

**David Todd** [00:58:03] Okay.

**Michael Robinson** [00:58:04] And that may well have been another subspecies, again, putative subspecies, that early taxonomists identified. Although later taxonomists say, "Well, we can blend this in with the, or, if you will, synonymize them with the Mexican gray wolves." And that was the Texas gray wolf. But that animal, is, *Canis lupus monstrabilis*. If that was a subspecies, the last two were shot in 1970.

**David Todd** [00:58:35] Okay.

**David Todd** [00:58:38] So, I'm also curious about this response that the State of Texas took to Fish and Wildlife Service's proposal that, it, along with Arizona, New Mexico, cooperate in this recovery plan. And Texas says, "Oh, no, we have a state law that prohibits release of Mexican or wolves in any kind in the state." And I consider, first of all, I guess there's a, you know, a preemption problem there. But secondly, I think that you or others have pointed out that that statute didn't really say that the government couldn't release wolves. Is that correct?

**Michael Robinson** [00:59:20] Well, I'm sorry that I can't answer that because I actually haven't read the statute. I read long ago the response that Texas sent. But I didn't go back to the original statute, so sorry I can't fill you in on that.

**David Todd** [00:59:32] Okay. All right, that's fine.

**David Todd** [00:59:35] So, maybe we can sort of go forward a little bit, and talk about the possibility, you know, maybe you can sort of work with us here about if wolves were released in Texas. What do you think the value of that would be ecologically or ethically? You know, maybe you can just imagine with us.

**Michael Robinson** [01:00:08] Well, I should say that, you know, the potential value is expanding the distribution of Mexican gray wolves, which are still very endangered. And a place to expand their population as well, their numbers.

**Michael Robinson** [01:00:25] Ecologically, you know, it's well known that wolves, and other top-level carnivores have profound influences on other species, and not just the species that, you know, you would say, "Okay, well, a wolf attacks deer, and that hones the instincts of the deer, the survival of the fittest, its ability to, its alertness, whatever the case may be. That certainly is the case.

**Michael Robinson** [01:00:52] But there's also there's also benefits to other species, including vegetation that, I mean, there's all these studies from Yellowstone National Park and from other places. There's benefit to the species of animals that are eaten by coyotes. Wolves kill coyotes. They see them essentially as competitors. You know, canines, canids in general, are territorial, and they, you know that if you've got a dog and you walk the dog and you run into another dog out there. There's a little bit of a standoffish moment while they figure out, are you on my territory? Am I in your territory? Can we get along?

**Michael Robinson** [01:01:32] Anyway, wolves kill coyotes. Coyotes kill other animals. And, in some cases, those other animals have benefited when wolves have recovered or increased their distribution or their numbers.

**Michael Robinson** [01:01:47] So, there's all kinds of possibilities for that occurring in Texas.

**Michael Robinson** [01:01:50] But the big caveat is two-fold. One is that in very few places are wolves actually allowed to carry out their ecological function. In many places, most places, that wolves are recovering or have been reintroduced or are struggling to survive, the euphemism is "they're controlled", which typically means a bullet is put in them if they get, you know, cross-ways of human interests and most specifically of livestock interests, if they prey on livestock.

**Michael Robinson** [01:02:22] And that means that in, in most places, and Yellowstone National Park is almost the sole exception, although, Denali National Park and maybe a few other places in Alaska also maybe provide exceptions. But, in most places there simply aren't enough wolves on the landscape to exert the ecological influences that help other species and make such a difference.

**Michael Robinson** [01:02:49] And that that brings us to the subject, which is that nobody knows for sure how wolves would fare in Texas. There has not been a study of habitat capacity in West Texas that I'm aware of. That would be a first step.

**Michael Robinson** [01:03:05] And the next step would be inclusion of areas in Texas, presumably, Big Bend National Park would be the heart of that area in a wolf recovery plan. One of the challenges is that outside of Big Bend National Park, it's private land. In contrast to the western states, the more western states, like New Mexico, where we have, you know, as an example, we have the Gila National Forest and the Apache National Forest, 4.4 million acres. But then adjoining the Apache National Forest, there are other national forests, the Sitgreaves National Forest, further west and northwest, and the Tonto and the Coconino National Forest. And even outside of the National Forests, there's Bureau of Land Management holdings, BLM public lands, as well.

**Michael Robinson** [01:03:52] And all of these places are places where, at least in theory, you know, the interests of the citizens at-large, are, you know, kept into account, and the land is managed for the United States. And private land, obviously, is a very different story.

**Michael Robinson** [01:04:09] So, that's a big challenge is the very significant number of livestock, and the, you know, the uses of private lands, extensive, millions of acres of private land in West Texas that are private ranches. That doesn't mean wolf recovery can't be accomplished. But, you know, I think we need to be forthright that it's not going to be easy. Not that it's easy anywhere, but there's some additional challenges that may occur in Texas.

**David Todd** [01:04:38] Okay.

**David Todd** [01:04:39] Well, maybe we can return to where you were before. And you've explained to us that releases were made. And I'm curious if you can talk about the period since those releases were agreed to in the late '90s. How have they fared in, you know, an onslaught of, I guess, predator control - you said control has been a sort of default - and I guess there's issues with water shortages, parvo, overgrazing. You would know better than me, but maybe some of those are the ones that I'm curious about.

**Michael Robinson** [01:05:20] Yeah, I don't know that water shortages, per se, have been a problem. Wolves, of course, roam widely, and they can, you know, if they're in a dry area, they can keep going until they hit a stream or something. Drought certainly is. You know, global warming is, you know, obviously a catastrophe for the natural world everywhere. And in the southwestern United States, it is manifesting as drought, recurring droughts, you know, where we have much less of a snowpack in the wintertime, and, of course, consequently, less water in the streams and less vegetation.

**Michael Robinson** [01:05:53] And, one way that, I don't know that there's ever been a study, per se, of this, but it seems like that might affect, if it hasn't already, elk numbers and distribution. And another way that I think really does make a difference, that I can be more sure about than speculating about elk numbers and distribution in this relatively early period in the onset of global climate change, what I can be more sure about is that domestic livestock don't fare as well, cattle in particular, in extreme drought as they do otherwise.

**Michael Robinson** [01:06:35] And that's, along with overstocking, there's not necessarily as much grass for cows, as they should have. And they're in weakened condition in some cases. And in other cases, they simply just don't make it. They die from whether it's disease or accidents like falls. I mean, I've seen cattle in the Gila National Forest that are on like almost 90-degree slopes trying to get a little bit of grass that other cattle hadn't gotten, you know,

because the area further down maybe denuded. I don't know if it was 90 degrees, but it looked like very precipitous for a cow. Sometimes cows even fall and get injured and die.

**Michael Robinson** [01:07:19] In any event, cattle die of a variety of non-wolf causes, exacerbated, in my view, by drought. And, wolves, over and over again, have found the carcasses of cattle and scavenged on them. Just like if you don't put a top on your garbage good enough and there's a dog outside roaming the street, he might knock over that garbage and help itself to your chicken, the remains of your chicken dinner or whatever it may have been.

**Michael Robinson** [01:07:51] Well, wolves will eat carrion as well. And what we've seen over and over again is that being drawn to areas where there's a dead cow, a wolf will stay there and feed on it, sometimes for a week or more, two weeks, whatever it takes. And of course, there's bears and vultures and eagles and everything else is trying to get a meal from those animals as well.

**Michael Robinson** [01:08:13] And then typically where there's one dead cow, there might be others. And a wolf, maybe there's an interesting smell a mile away, and a wolf trots over there after having localized where there's one dead cow and there's another one. Like a great place to set up shop.

**Michael Robinson** [01:08:28] And where there's dead cows, there's dying cows. And at some point, oftentimes, such wolves have transitioned to killing a cow. I've seen cows that can't even get up. They've got some kind of malady that they can't get up.

**Michael Robinson** [01:08:44] Well, obviously, that's a very vulnerable animal to a wolf or any other predator.

**Michael Robinson** [01:08:48] And then, all of a sudden, you've got a so-called "depredating wolf", and the U.S. government, you know, it flies in and shoots it, or in other cases, traps the animal and removes it alive.

**Michael Robinson** [01:08:59] And we don't have time to go into even a fraction of what I consider atrocities, U.S. government atrocities. But the U.S. government has had a very active Mexican wolf control program. They've killed quite a few wolves, I don't have memorized at the moment how many.

**Michael Robinson** [01:09:19] They've accidentally killed in the course of trying to capture alive about twice as many as they've actually intentionally killed in the wild since the reintroduction in 1998.

**Michael Robinson** [01:09:30] They disrupt family units. In some cases, pups have lost parents to government control operations, disappeared and weren't old enough to have survived on their own. And that's really handicapped the growth of the wolf population and really, more catastrophically, the U.S. government has actually reduced the genetic diversity stemming from those additional seven surviving wolves. They've managed to the equivalent of 2.09 wolves.

**Michael Robinson** [01:10:04] Geneticists have several metrics for measuring the genetic diversity in populations. One of those metrics is called founder genome equivalence. And that's what I mean when I say that the genetic diversity from seven founding animals has been

reduced to the equivalent of 2.09, founding animals in the wild population of Mexican wolves, through mismanagement, through the U.S. government shooting wolves, through the U.S. government trapping wolves and removing them from the wild.

**Michael Robinson** [01:10:41] And in many cases, those animals were not allowed to breed in captivity. So, their genetic contribution was as much of a dead end as if they had been shot. Obviously, a different personal fate for an animal that's shot versus one that's captured, although not a happy one for captured animals either.

**Michael Robinson** [01:10:59] And the other reason that the genetic diversity has collapsed in this manner is because, under pressure from the livestock industry, the U.S. Fish and Wildlife Service stopped releasing wolves from the wild after 2006. They had a very successful program of releasing family groups, because they understood that wolves are social animals that support each other, this being well understood in society at large.

**Michael Robinson** [01:11:30] But, they stopped releasing the wolves. The last family pack released - well-bonded, male-female pairs, with pups - was released in 2006.

**Michael Robinson** [01:11:43] I can go into, I can just briefly tell you a little bit of the politics. We don't have a lot of time, I know. But, it was my former congressman (I'm in southwestern New Mexico), Steve Pearce, convened or forced the U.S. Fish and Wildlife Service, leaned on them, I should say, to convene two meetings, closed-door meetings between ranchers and high-level Fish and Wildlife Service officials in the Southwest, at the same time that there was a public process for a decision on wolf management, in which the members of the public could meet low-level officials, were not afforded any opportunity for testimony, but they could chat with them.

**Michael Robinson** [01:12:27] They were called "open houses". And they could submit written comments. But, of course, most people don't. You chat with a nice young person, most of them are young, about wolves and you give them your opinion. And you feel like you've done something. And you don't bother writing something out.

**Michael Robinson** [01:12:40] But at the same time, the ranchers had closed-door meetings with high-level officials, and they yelled at them, from written accounts that we got through the Freedom of Information Act. They yelled and screamed at them. They abused them. And the officials in those meetings pledged to stop releasing wolves to the wild. They said, "We're going to have a moratorium." And then they announced it.

**Michael Robinson** [01:13:03] And then they had some criteria for initiating the moratorium as to a minimum number of wolves. But they were already killing wolves so fast that they couldn't even make the minimum. So, officially, the moratorium didn't happen, but they had not paired wolves together in anticipation of releases. So, informally, the moratorium still happened. The end of this was around 2005 or something around then.

**Michael Robinson** [01:13:27] They did release the next year, as I said, a family pack in 2006. But then they shut it down entirely.

**Michael Robinson** [01:13:33] And then they started coming up with new rationales for not releasing wolves. The first rationale was the honest one. The ranchers yelled at us and we said we wouldn't do it anymore. But then they came up with scientific-sounding ones, or ones they

thought sounded scientific. And I don't have the time to give you the whole litany of excuses, and pledges made and pledges broken.

**Michael Robinson** [01:13:55] But that also meant that there was very little, basically none, genetic diversity that was, after 2006, was coming from the captive population into the wild population. And along with the killings of wolves in the wild, that led to the decline of genetic diversity.

**Michael Robinson** [01:14:13] Scientists were going nuts, independent scientists, as they documented the decline of genetic diversity in the wild population. And eventually, Fish and Wildlife Service decided to start releasing wolves again, but they decided to do it in the way I mean. This is my retrospective assessment. But I think it's very supportable. They decided to do it in a way that maximizes wolf mortality.

**Michael Robinson** [01:14:39] They had, after the 2006 releases of wolves, a release of one family pack, which, as I said, was a very successful method of releases. The wolves knew what to do, even though they'd been born in captivity. They knew how to hunt wild prey. They knew how to dig dens, instinctively, to defend their territories from other wolves. They did great.

**Michael Robinson** [01:15:00] But, after that, the Fish and Wildlife Service sporadically would release like a wolf here and there. They would, like, take a wolf from captivity, capture a wolf in the wild, pair the two together for a very short period of time. Release them. These freaked-out wolves would immediately separate. Both of them would typically come to no good ends, dead or captured again. They didn't contribute, and very few, if any of them, contributed genetically to the wild population.

**Michael Robinson** [01:15:27] In 2016, as the Mexican wolf's genetics were just abysmal, Fish and Wildlife Service resumed releasing wolves. This time they started a program of taking newborn pups, born in captivity, from their mothers, and transporting them to the dens of wild wolves and inserting them into those dens.

**Michael Robinson** [01:15:54] Since 2016, the government has released 99 wolves that way through now, which is, well, it's not ... They're going to do it again in 2024, in about a month and a half. But through 2023, they've released 99. 73 of those disappeared. Nobody knows what happened to them.

**Michael Robinson** [01:16:14] Another, and see if I get the numbers right, I believe it's another 14 of them, or so, were known to have died, and something like 15 are known alive now. And I might have the numbers off a little bit. But an extraordinarily high mortality rate, at least an extraordinarily high disappearance rate.

**Michael Robinson** [01:16:38] Now, very, very rarely, some disappeared wolves in subsequent years are have found. Turns out they're alive. But most of these disappeared wolves, the vast majority, are never seen again. We can hope they're alive. But really, there's no evidence of that.

**Michael Robinson** [01:16:54] And, the Fish and Wildlife Service, as I said, they went through a series of rationales, the most recent of which is that there's more social support for releasing pups without their parents than releasing family groups. Well, by social support, they mean the ranchers aren't as opposed.

**Michael Robinson** [01:17:13] Now, ranchers are not dumb. They realize that wolf pups grow up to be wolf adults. They don't like wolves. It's not that they're more accepting of pups than they are of adults. They can look into the future. It's that they're more accepting of wolves that end up disappearing and never seen again than they are of wolves that are alive and well. That's why they're more accepting of it. And that's why Fish and Wildlife Service does it, notwithstanding that the genetic diversity has remained stagnant.

**Michael Robinson** [01:17:48] And every wolf in the wild in the southwestern United States is as related to every other wolf in the wild, on average, as if, almost as if, they were full siblings. If there were 2 founder genome equivalents in the population, they would be exactly as if they had the same two parents. But the fact that it's 2.09 means they're a little tiny bit more unrelated, but still catastrophically low genetic diversity.

**Michael Robinson** [01:18:15] And we're already seeing effects of that. And if it's not corrected, it's not fixed, the Mexican gray wolf will go extinct eventually, notwithstanding the ambivalent efforts that the U.S. Fish and Wildlife Service has been making to try and save the species that they once almost finished off.

**David Todd** [01:18:38] Well, this gives us, I guess, a little idea of what's been going on up to the present day. I had a couple more questions, but I want to be respectful of your time. Do you have maybe 15 minutes or so?

**Michael Robinson** [01:18:53] Yeah, we can take a few more.

**David Todd** [01:18:54] Okay.

**David Todd** [01:18:56] Let's talk about, the origins and process of writing your book, "The Predatory Bureaucracy". I can tell from the heft and detail and literary qualities that it was not an easy and whimsical thing. So, tell us what the origins of that book were.

**Michael Robinson** [01:19:19] I took a ... the only law school class that I ever took was when I was in graduate school for literature at the University of Colorado at Boulder. There was a class by the esteemed and now, the late, Charles Wilkinson on, I can't remember what it was titled, something like "Environmental Law and Philosophy". And, it was a wonderful class. And I, as a final project for that, I wrote a paper on wolves in Colorado, using a little bit of bounty records that I looked up that were kept in the Colorado State Archives.

**Michael Robinson** [01:20:04] And I can't remember how long the paper was - 12 or 15 pages or something - and then I decided to continue that into a book. And the Summerlee Foundation, which is a foundation based in Texas, which focuses on Texas history and on animals, funded the project, two years of funding for it. I thought it was going to be a two-year project. It turned out to be a 13-year project.

**Michael Robinson** [01:20:27] And I went through many archives and original sources, government archives, private archives, did quite a lot of reading of background. I wanted to try and paint something of a picture of the society because rather than just say, "Okay, these wolves got killed". It was more the model, the model of the book that I mentioned that I had read that sparked my interest, "The Wolf in the Southwest: The Making of an Endangered Species", focused almost entirely on the wolves with a little bit of the context. And I wanted to provide more context.

**Michael Robinson** [01:21:01] So I did a lot of reading about the political and social and economic, as well as the geographic and biological, context, what was happening to landscapes on the ground, what was happening to other wildlife species in Western expansion, as policies towards wildlife and towards land use evolved.

**Michael Robinson** [01:21:22] And I just kept working at it and eventually got the book published in 2005 and has been well received.

**David Todd** [01:21:32] Well, thanks for your contribution there. I think it helps a lot of us understand more of this long arc about people and wolves.

**David Todd** [01:21:41] And one thing I thought was really interesting about your book was that, of course, a lot of it was about wolves and the agencies that, you know, pursued these animals. But I think you try to point out that there's tension within the agency, as there are people made up these bureaucracies. And I'm really curious about the tie and the tension between, Mr. Young, Stanley Young, and then, Aldo Leopold. Can you talk a little bit about them and their attitude about wolves?

**Michael Robinson** [01:22:16] Well, I mean, tension, I guess I created a little bit of literary tension in the book, but they were not, I think their life spans well, their life spans certainly did overlap, but they were not of the same generation. Aldo Leopold. Gosh, I feel like I'm at a pop quiz at the moment here. I can't remember the year of his birth, but he was, I think, a little bit older than Stanley Young.

**Michael Robinson** [01:22:44] Stanley Young was, you know, he developed quite a history of wolves that I relied on quite a lot, as well as his, you know, his unpublished, papers. And he put a lot of his accumulated scholarship into a 1944 book called "The Wolves of North America", in which he, near the end of his career, young's career, did, a little bit, moderate what was really the animating principle of his work, which was systematic extermination of predators that got in the way of livestock. That's really what he did for decade after decade, and set up a program to make it efficient, or improved the program to make it efficient and the like.

**Michael Robinson** [01:23:39] And he sort of took that base vitriol against predators and sort of dampened it down a little bit. And it was very, "The Wolves of North America" is very much of a scholarly work.

**Michael Robinson** [01:23:52] But he failed to see the connections in nature that Aldo Leopold, who, for whatever personal and career reasons, was more open to the profound changes in the landscape from the grazing of livestock in the southwestern United States.

**Michael Robinson** [01:24:14] You know, they both, both Aldo Leopold and Stanley Young, were personal witnesses of what was happening to the landscape and to the biota, to the animals and plants. And Aldo Leopold had, I guess I would just say, a little bit more open curiosity.

**Michael Robinson** [01:24:29] And yes, they did actually have an exchange. So, you've read my book more recently than I have, David. They did have an exchange, that I found in Young's papers, in which, Leopold had written Young a note complimenting him. I think it was on a magazine article, but maybe it was on The Wolves of North America. Actually, I think it was on



a magazine article. And, and Young sent the note to his supervisor, with a little bit of an invidious note of his own. And I'm sorry that I don't have it memorized, but basically something to the effect of, you know, "I thought Aldo Leopold knew everything. Turns out he's discovered something that we knew that he didn't know." It was a bit of a kind of a jab, not personally directed at Aldo Leopold, but I found it revealing enough of maybe a little bit of attention.

**Michael Robinson** [01:25:28] That came about because, by the 1930s, Aldo Leopold was a very recognized and extraordinarily well-respected biologist, in large part because he was willing to sort of think, well, what we call now, "think outside of the box", but basically avoid, you know, go beyond the cliches and try and observe and understand, in a way that Stanley Young, who had a goal - get rid of the predators - never, never evinced that same level of curiosity.

**Michael Robinson** [01:25:56] So, I think there was a little bit tension, at least from Young's point of view, or a little bit of jealousy even, towards Leopold.

**Michael Robinson** [01:26:05] But there was no, you know, there's no big public event or anything of that that I've ever, that I have any awareness of.

**David Todd** [01:26:11] Okay.

**David Todd** [01:26:13] So, two more questions. If we can do that.

**Michael Robinson** [01:26:18] Yes.

**David Todd** [01:26:18] First is just, you've been in this position of speaking out on behalf of wildlife and apex predators for 30-odd years. And I was wondering, as you look back on your life and career as a conservation advocate, what do you think about that work?

**Michael Robinson** [01:26:42] Well, I feel very privileged to do the work that I do in particular, with incredibly talented colleagues at the Center for Biological Diversity, and the support that I get with this extraordinary organization that has made such a difference for, as I said earlier, for hundreds of animal and plant species, including the Mexican gray wolf.

**Michael Robinson** [01:27:05] I have been doing it for almost my entire adult life. And I've seen, you know, I've seen some real differences. I mean, the victories are wonderful. With the Mexican wolf, we've greatly curtailed the federal killing program, albeit after it did tremendous, and conceivably even irreversible, damage. But they're barely ever killing wolves now, which is good, you know, and they could resume.

**Michael Robinson** [01:27:33] We've seen, through our litigation and public organizing, a 17-fold expansion in where the Mexican gray wolves are allowed to roam. I had mentioned earlier that they were confined under a 1998 federal regulation to just being able to establish territories in the Gila National Forest and the Apache National Forest. And I should mention that that 1998 Fish and Wildlife Service regulation also allowed private landowners whose land directly adjoins the Gila National Forest or Apache National Forest, if they requested, that wolves can actually live on their lands, as well as tribes that have reservations that are directly adjoining. But if they don't, if they don't specifically want them, they have to be removed and they have to be removed from other public lands as well. That was in 1998.

**Michael Robinson** [01:28:23] Well, we got those boundaries increased, as I said, by 17-fold through litigation based on what scientists had been writing, and through public organizing. And the boundaries now, which are still not based on science, not based on recent science, certainly, that contradicts old assumptions, the boundaries are now Interstate 40 on the north, and the Texas border on the east.

**Michael Robinson** [01:28:51] And, ultimately, it's lot of land, but not as much as the Mexican wolves really need to recover, particularly in southwestern Colorado, where, as I said, there was a supposed different subspecies, but that one has been eliminated for, you know, a century now, or almost a century. And, Mexican wolves are closely related and are the most imperiled subspecies and the most appropriate subspecies to put in southwestern Colorado.

**Michael Robinson** [01:29:30] So, there have been ... and I digress again as to what remains to be done. But there's been tremendous successes that we've seen.

**Michael Robinson** [01:29:37] And, you know, I can't deny the heartache of seeing animals and plant species dwindle, and their habitats get transformed or not rehabilitated when they're needed.

**Michael Robinson** [01:29:51] And, obviously there's a lot more humans on the planet now than when I started as an advocate, almost four decades ago. A lot more, you know, places I know that, you know, you just see more people, more development. And that's the case for everybody who's paying attention on the world, in the world.

**Michael Robinson** [01:30:11] So, you know, I feel incredibly privileged to do this work. It's what I want to be doing. And, I do feel very happy to be with the Center for Biological Diversity because, for many reasons, including that it's an organization that's really making a difference on the ground and for critters and native plants that need it.

**David Todd** [01:30:35] Okay.

**David Todd** [01:30:38] I have a similar overview question about the wolf. And I'm wondering, after all these years of thinking about the wolf, studying it, advocating on its behalf, what sort of value do you see in the animal, whether it's ecological or ethical or utilitarian? And then kind of as a follow-up, do you see a value in an individual wolf, or do you more think of it as, you know, how does that individual contribute to the population? Is the population robust, sustainable and so on? Or do you see, you know, that there's a personality or some sort of character to each wolf that has value?

**Michael Robinson** [01:31:19] Well, I'll just start with that question. I do see that each animal has value. And there is, there has been a bit of a split, at times at least, between conservationists who view the value in populations and species, and certainly, also if not predominantly, and again, just to create sort of broad stereotypes, animal rights-oriented people who see the value in the individual.

**Michael Robinson** [01:31:45] And I don't see any contradiction whatsoever between those points of view, and in particular with an animal like a wolf, where, you know, as I mentioned earlier, they're social animals, they have personalities, they have deep relationships with family members. They make choices. They think about what their day is going to be like later in the day - you know, what they plan to do. And one can see, and should see, them as individuals, because they are.

**Michael Robinson** [01:32:16] But, you know, the conservation point of view is obviously the value of the species and its interaction with other animals and plants and, and on the landscape. And for that, there's lots of value.

**Michael Robinson** [01:32:31] I mean, there are not a few species out there that one would struggle to find what their ecological value is to other species. Now, certainly almost everything can be eaten by something else. And that's not, that ain't nothing, if you're a hungry critter out there and there's something to eat.

**Michael Robinson** [01:32:51] But in terms, you know, in terms of really strong ties, strong connections between different species and their interactions, the higher one gets up the food chain, the more one discovers those and how much they make a difference.

**Michael Robinson** [01:33:14] And there have been many scientific studies. I mentioned, I alluded to them earlier, showing that wolves are really pivotal in transforming, not just the fates of other species in their vicinity, but even the landscape itself. I mean, there's a widely viewed video about how wolves change rivers, that actually has a number of factual errors in it, but the basic point that wolves can affect hydrology is true.

**Michael Robinson** [01:33:40] And, you know, I just think that's really important: that we have to look at the whole. We are part of a whole.

**Michael Robinson** [01:33:47] The natural world has inherent beauty and inherent value. And if we're not focused, as we transform the world through global warming and habitat destruction and pollution and introduction and spread of invasive plant and animal species, we have look at the whole. We have to see value in all of it.

**Michael Robinson** [01:34:12] And we have to particularly see the value in the dynamics, the ecological dynamics, that sustain the whole, whether that's a flood that wets an area alongside a stream. You know, here in the Southwest, sometimes our monsoon floods leave areas 200 feet from the river basin wet. And that's an area where cottonwood seedlings can germinate.

**Michael Robinson** [01:34:36] So, a natural flood that can be disrupted by a dam that changes the hydrology, or whether it's natural fires that over hundreds of thousands of years have kept the ponderosa pine trees well spaced apart by burning small trees and allowing grass to grow in between them. That has, you know, all kinds of effects on all kinds of species and the structure of the ecosystem.

**Michael Robinson** [01:35:02] Or in the process of predation, which has also these tremendous ramifications that other species have adapted to over the course of many, many thousands, tens of thousands, hundreds of thousands, even more, maybe even millions of years. And as I alluded to earlier, survival of the fittest is one of them. You know, the ecological process by which animals that are prey, you know, either have the genes that allow them to survive (or that are potential prey) or they don't.

**Michael Robinson** [01:35:35] And the ones that don't, you know, that are less fast or less robust in fighting off a wolf with their hooves or whatever the case may be, don't make it, don't pass on their genes. And the ones that do have those key survival attributes do pass on their genes.

**Michael Robinson** [01:35:49] But also more, more subtle interactions: I mentioned wolves' effects on coyotes. Well, pronghorn antelope in Grand Teton National Park, south of Yellowstone National Park, increased their numbers after wolves were reintroduced into Yellowstone. The coyotes had been preying on pronghorn fawns to the extent that the pronghorn were in a long decline. When wolves were reintroduced, that leveled out, and then the pronghorn numbers have been increasing because the wolves control the number of coyotes. And certainly, a wolf will, a hungry wolf that happens on a pronghorn fawn will kill it and eat it, but they don't search out the fawns because they're not very much food for a pack of wolves, a family of wolves.

**Michael Robinson** [01:36:37] Whereas the coyotes were really focusing in on them. A coyote is, of course, a smaller animal and oftentimes a smaller family unit. They would focus on the fawns.

**Michael Robinson** [01:36:46] And in the Midwest, a similar phenomenon: the lower density of coyotes in areas that wolves inhabit has led to greater survival of snowshoe hares. And scientists have hypothesized that that could lead to greater survival of Canada lynx, which is an imperiled, a threatened species, that in large part depends on snowshoe hares. Now coyotes, they'll eat a lot of different animals. They're, you know, whether it's a snowshoe hare or a bunny rabbit, that's not quite a snowshoe hare, but a different species, or a squirrel or whatever, you know, a little bit of garbage they can happen on.

[01:37:24] But a Canada lynx? You ask a Canada lynx, "What's for dinner?" And, you know, nine times out of ten, it's snowshoe hare.

**Michael Robinson** [01:37:31] And so anyway, there's all these subtle interactions that scientists are learning about in which wolves really can benefit so many other species. And I think that really has to be really appreciated as well.

**Michael Robinson** [01:37:45] And I guess lastly, I would say that because our society was responsible in a very systematic, cold-blooded way for the extermination of wolves, it wasn't just a happenstance, "Oh, this is inconveniencing me. Let's kill it." It was like, "Okay, how do we get to the last one? How do we manufacture poison, where the bitterness of the strychnine is concealed by the quarter-inch of fat on the outside of the bait, so the animal swallows it, but not too big that it bites into it?"

**Michael Robinson** [01:38:15] You know, they thought this through very carefully. And I think that there's a level. I guess I would call it a level of evil, even though I'll recognize certainly a large substrate of ignorance that I guess has to be credited to people 100 years ago who were involved in that.

**Michael Robinson** [01:38:31] But I, you know, my current, in 2024, with the collapse of ecosystems, I'm just going to go ahead and call it, in my value system, a bad thing, wicked, evil.

**Michael Robinson** [01:38:41] And I think that coming to grips with the wrong course that our society has taken, in a democracy, where the government is acting on behalf of all of us, at least in theory, I think that's an important thing for our society. I think it's important to confront the things that we did wrong, the things where we hurt others, where we did damage ultimately to ourselves, but certainly to the wolves and to ecosystems.

**Michael Robinson** [01:39:08] And that wolf reintroduction, yes, it follows the Endangered Species Act. It's the law of the land. We've got to recover endangered species, and we got to conserve the ecosystems on which they depend. And wolf conservation certainly does conserve ecosystems.

**Michael Robinson** [01:39:23] But I think for our society, there's another element. It's a maturity. It's a coming to grips with what we did, even if none of us who are around now, were working on this program in 1924 or 1929 or whatever. But it was our society. It was our government. It was done on, supposedly, at least theoretically, on our behalf.

**Michael Robinson** [01:39:43] And by repudiating that, by saying that was wrong, we're going to fix it, we have taken a step forward in maturity as a society and moral responsibility. And that can't hurt as we make decisions in the future in a very complex and vexing world.

**David Todd** [01:40:03] Really well put. Thank you.

**David Todd** [01:40:06] So, it's all I got. And thank you so much for doing this.

**David Todd** [01:40:10] I know that we probably skipped over a lot of good things that you could share with us. Is there anything that you'd like to just add right now before we close down?

**Michael Robinson** [01:40:21] I don't think so, David. You asked me good questions, and I thank you very much for your interest in my pursuits and activities. And I really appreciate the work that you're doing in recording, not just myself, but the many other people who've had an influence on the natural world. And you're thinking long term. So thank you.

**Michael Robinson** [01:40:42] Oh, well, it's good to hear your stories, and I wish you the best with your, you know, continuing success. Thank you very much.

**Michael Robinson** [01:40:52] Thanks to everybody who listened through this, whether now or sometime in the distant, distant, unforeseeable future.

**David Todd** [01:40:59] That's right. We'll put it in the time machine. Thank you so much. I appreciate it. You have a good day. Thank you.

**Michael Robinson** [01:41:06] You too, David. Take care. Bye bye.

**David Todd** [01:41:06] Bye now.