

TUNE IN TO THE
SOUND OF DEMOCRACY

Justice Talking Radio Transcript

From Condors to Big-Horned Sheep: Does the Endangered Species Act Work?—Air Date: 7/3/06

The House of Representatives recently passed a bill which would substantially modify the 33-year-old Endangered Species Act. Supporters of the proposed changes believe the Act has done little to protect wild habitats or threatened species and needlessly ties the hands of farmers, ranchers and other private property owners. But environmentalists continue to support the original law, believing that that government has an obligation to protect fragile ecosystems and species that may soon become extinct. On this edition of Justice Talking we examine the Endangered Species Act and how best to preserve biodiversity.

This transcript is being provided free of charge for educational purposes. The views expressed herein are those solely of the guests and do not reflect those of the Annenberg Public Policy Center or NPR. Although every effort is made to make a verbatim rendering of the program, this transcript may vary slightly from the audio version and may contain minor grammatical or spelling errors. For permission to reprint, please contact Laura Sider at the University of Pennsylvania's Annenberg Public Policy Center, (215) 573-8919.

MARGOT ADLER: From NPR, this is Justice Talking. I'm Margot Adler. The Endangered Species Act is intended to protect animals and plants threatened with extinction. It's been over 30 years since the Act became law. Critics say it's time for Congress to loosen regulations.

UNIDENTIFIED MALE: I mean, landowners are not afraid of a bird on their land, but what they are afraid of is the feds on their land. And if you penalize people for doing good things, for having a habitat on their land and so on, they'll stop doing that.

MARGOT ADLER: But environmentalists argue the Act has protected threatened species and slowed the rate of extinctions. The Endangered Species Act is our topic. We look at its impact on animals and plants and its future. Is it threatened with extinction? Stay with us.

MARGOT ADLER: This is Justice Talking, I'm Margot Adler. The Endangered Species Act was signed into law in 1973 to protect plants and animals at risk of extinction. The Act is credited with saving species like the whooping crane, the Florida panther and the bald eagle. But critics have argued that the Act works against private property owners and not with them in protecting endangered species on their land. The House of Representatives addressed those concerns earlier this year, passing a sweeping bill, which some environmentalists say puts private interest before public good.

On today's show we'll debate some of the proposed changes being considered by Congress. We'll also look at the history and impact of the Endangered Species Act. Later in the show we'll hear from a California rancher who says the protected species of microscopic shrimp is preventing him from developing his land, and from a biologist whose life's work is to save a type of wild rice that grows in just one place in the entire world, a two-mile stretch in Texas.

But first we head to Colorado to visit a small mouse that's been creating some big conflicts. The Fish and Wildlife Service will decide this August whether to remove the Preble's meadow jumping mouse from the endangered species list. From Denver, Benta Birkland has this report.

BENTA BIRKLAND: Two zoologists are tracking the Preble's meadow jumping mouse on the Air Force Academy grounds in Colorado Springs. Armed with notepads and rubber waders they go from site to site looking for mouse traps they set up earlier in the week.

ROB SHORE: Is that 25 John? Hold on a second, I think you'll have to go to the next one.

BENTA BIRKLAND: The Preble's Mouse lives in wetlands habitats in southern Wyoming and along Colorado's Rocky Mountain Front Range. It's been on the endangered species list for the last eight years. Zoologist Rob Shore works for the Colorado Heritage Program. He says one of the state's largest known populations lives on the Air Force Academy's property.

ROB SHORE: Estimates range from anywhere from 500 to 1,500 individuals annually along Monument Creek.

BENTA BIRKLAND: The mice are waking up from their winter hibernation and Shore and his colleague are capturing and tagging them. They'll do this again at the end of the summer to determine survival rates and track its movements. Shore bends down and picks up a trap, a metal box filled with oats and fiber bedding. And now, a mouse.

ROB SHORE: John, I got one. So with each new capture I want to know their sex and their weight, so we'll note it on the tag. And we can send him on his way.

BENTA BIRKLAND: The Preble's mouse is brown with a rust colored stripe on its back and a long tail. It has large hind legs and can jump up to three feet and weighs about twice as much as a Ziplock plastic lunch bag. Shore says its small size can make life difficult.

ROB SHORE: They're at the bottom of the food chain so there's almost everything out there trying to eat them. The average life span is probably a year to two years with the snakes and hawks that exist in that system.

BENTA BIRKLAND: But it's not just predators that threaten the Preble's mouse. Human development also plays a role.

DIANE KATZENBERGER: I've always kind of considered the Preble's meadow jumping mouse to be sort of the yuppies of the mouse kingdom, because they prefer sort of the high-end real estate just like people do.

BENTA BIRKLAND: That's Diane Katzenberger. She works for the U.S. Fish and Wildlife Service.

DIANE KATZENBERGER: Whenever you have, you know, an animal species and humans occupying the same habitat there can be conflict, as we're seeing with this one.

BENTA BIRKLAND: The mouse's habitat encompasses Colorado's largest population centers, from Pueblo through Denver up to Fort Collins. The Denver metro area alone has grown an average of more than two percent each year in the last nine years. David Jones designs and plans subdivisions along the Front Range. He says the mouse can make projects prohibitive.

DAVID JONES: If it needs to be protected then the person whose land is being taken for that protection should be justly compensated. You can't allow the public on it. You can't even make it a park, for instance, because of the protection requirements for the mouse. The presence of the Preble's meadow jumping mouse doesn't mean development automatically stops. Local and federal laws allow some building, but people must go through several steps to minimize any adverse impact on the mouse. The steps can vary depending on the location and type of development. Mike Bonar is the natural resources manager for El Paso County. The entire county is considered mouse habitat and includes the city of Colorado Springs. Bonar helped create a habitat conservation plan for the area. It walks people through the process of building and outlines the steps they must complete. It will be finalized in a few months.

MIKE BONAR: We're able to take a closer look at where the habitat is and design a plan that preserves habitat but also allows for development to occur. We hope to have areas of well-connected good habitat so the mouse can move up and down through these corridors.

BENTA BIRKLAND: But the county's conservation plan may never go into effect. The Fish and Wildlife Service recommended removing the mouse from the endangered species list last year after a study said it was a subspecies of a different mouse that's not threatened. Many scientists disagreed. They say the research was flawed. The Fish and Wildlife Service is re-evaluating its recommendation and expects to have a final decision by early August. Until then the mouse stays on the list. Mitch King is a regional director for the Fish and Wildlife Service.

MITCH KING: What really brings this to a head with Preble's and with other endangered species is that while the scientists are debating this and are working out the right answer, we have decisions that have to be made today that have a significant impact on communities.

BENTA BIRKLAND: A number of development projects are on hold awaiting the decision. There's a lot at stake economically. And even though the mouse is getting most of the attention, King says some of the land will be conserved no matter what happens because many of the building restrictions result from other environmental concerns.

MITCH KING: If you go back and you look at what the counties are doing when it comes to trying to control their own development, they're protecting the floodplain habitats. A lot of times the mouse ends up being the reason that people put on the front page as to why they're protecting those floodplain habitats.

BENTA BIRKLAND: The Colorado Division of Wildlife says that wetlands habitat makes up less than two percent of Colorado's landscape and benefits 75 percent of the state's wildlife. The outcome of the Fish and Wildlife's decision about delisting the Preble's may change some people's relationship with the land, but the issues raised are likely to have an impact far beyond a tiny jumping mouse. For Justice Talking, I'm Benta Birkland in Denver.

MARGOT ADLER: We won't know the fate of the Preble's meadow jumping mouse until later this year. We decided in the meantime to find out how species get onto the endangered list in the first place, and to understand the history behind this landmark Act. Dale Goble is a law professor at the University of Idaho, and he co-authored the book "The Endangered Species Act at Thirty." Welcome Dale.

DALE GOBLE: Thank you very much.

MARGOT ADLER: Why was the Endangered Species Act created?

DALE GOBLE: There was a growing emphasis on the loss of species beginning in the 1950s. It sort of peaked with the whooping crane. When the population dropped into the low teens people became very concerned with the loss of that bird and that became sort of a poster child, I guess. In 1964, the Department of the Interior created a committee on rare and endangered wildlife species. Two years later they came out with a list of some 330 species. They had concerns, I should say, about whether or not they were at risk of extinction.

MARGOT ADLER: Now why did lawmakers think that an act like this was needed and what was the political climate like for environmental issues at the time? I mean, I remember this act was passed just a few years after the first Earth Day.

DALE GOBLE: It was enacted in '73. It was actually the third Endangered Species Act. They enacted one in '66, one in '69 and then the beginning of the version we now have in '73. It was

probably the least controversial bill to come out of Congress in 1973. It was passed by the Senate unanimously. The House passed it 355 to 4, if I remember.

MARGOT ADLER: And why do you think that was? Why was it so non-controversial?

DALE GOBLE: I don't think that people understood how difficult it was going to be to recover species. People thought that you could sort of treat it as you were treating game species, for example. We had a fairly good track record in conserving game species and I think that a lot of people thought that the same kinds of things could be done to endangered species.

MARGOT ADLER: How does an animal or plant make it on the list?

DALE GOBLE: The Act provides that the secretary acting through the Fish and Wildlife Service can nominate a species, if you will. Most species now, however, are petitioned. Some group will petition the secretary to add the species to the list.

MARGOT ADLER: And once the animal is on the list, what kind of protections does that animal, or plant, we should say...

DALE GOBLE: That's one of the significant additions to the Act that came in 1973; plants were added. Before that it had been just fish and wildlife. Once a species gets on the list two different kinds of things happen. There are a couple of protective measures that kick in. One is consultation, which requires all federal agencies to avoid actions that threaten to jeopardize the species. The other protective measure is the take and commerce prohibitions; you can't kill or harass a species, you cannot sell parts of a species. So those are the primary protections.

MARGOT ADLER: Now how does an animal get taken off the list?

DALE GOBLE: It's the listing process in reverse. They are both decisions on the status of the species.

MARGOT ADLER: Could you give us just a couple of examples of some of the species that have been helped by the Act?

DALE GOBLE: I mean, the California condor has been helped by the Act. Wolves, wolves are perhaps the poster child of the Act's successes. And gray whales. There are a number of species that have been de-listed, so all of those have benefited from the Act.

MARGOT ADLER: And give me a couple of examples of species that have gone extinct despite the Act.

DALE GOBLE: The best example is the dusky seaside sparrow, which was in the Merit Island National Wildlife Refuge, which is around Cape Canaveral or Cape Kennedy, I guess—I'm dating myself here—which went extinct after it had been listed. It was sort of like the Fish and Wildlife Service just sort of lost track of the species; they didn't pay attention to it, when they looked next they only had a couple of males, which of course doomed it to extinction.

MARGOT ADLER: Dale Goble is the co-author of a book called “The Endangered Species Act at Thirty.” He is a law professor at the University of Idaho. Thank you so much for being with us.

DALE GOBLE: Thank you very much.

MARGOT ADLER: Coming up, two very different points of view on the Endangered Species Act.

UNIDENTIFIED MALE: What its authors really intended to do was to produce a bill that would achieve cost-free national land use control rather than really trying to find innovative and win-win situations to protect wildlife and habitat.

UNIDENTIFIED MALE: And we have a community interest in conservation, in having the beauty of life passed on to future generations.

MARGOT ADLER: Stay with us.

MARGOT ADLER: This is Justice Talking. I’m Margot Adler. Congress is considering some sweeping revisions to the Endangered Species Act. Does the Act work or is it time for an overhaul? Joining me to discuss this are Michael Robinson and R.J. Smith. Michael Robinson specializes in carnivore conservation at the Center for Biological Diversity. He is the author of “Predatory Bureaucracy: the Extermination of Wolves and the Transformation of the West.” R.J. Smith is an adjunct scholar in environmental policy at the Competitive Enterprise Institute. He is the author of a book called “Earth Resources: Private Ownership vs. Public Waste.”

It’s been 33 years since Richard Nixon signed the Endangered Species Act. I’d like both of you to talk about what its impact has been, both good and bad. You first, Michael.

MICHAEL ROBINSON: The Endangered Species Act represented a sea change in policy. Prior to that the U.S. Fish and Wildlife Service had been planting poison bates to destroy wolves and black-footed ferrets inadvertently, bears. They were killing things without regard to the consequences. And other agencies, the Forest Service, didn’t have to review the effects of building forest roads into remote habitats. And the Endangered Species Act brought things to a point where people could look at the precautionary principle; they could ask what are the consequences going to be of destroying this habitat, of planting these poison bates to kill animals that are inconvenient. And it’s resulted in stabilizing the populations of hundreds of creatures that were on a trajectory towards extinction and starting to build them up towards recovery.

MARGOT ADLER: R.J. what do you think have been the positive and negative aspects of the Endangered Species Act?

R.J. SMITH: Well, I'm sorry to say that I think it's been almost entirely negative. I think the basic flaw in the Endangered Species Act from day one, going back to the debate over endangered species and the effort to come up with this bill in 1972 and 73 was that what its authors really intended to do was to produce a bill that would achieve cost-free national land use control rather than really trying to find innovative and win-win situations to protect wildlife and habitat. What they ended up doing with this bill was essentially penalizing landowners who were good stewards. They said the more wildlife habitat you have on your land the more likely it is an endangered species will be found on your land and so you'll be shut down, you won't be able to use your land. The result of this, because of this perverse incentive, it made landowners fearful of being good stewards. I mean, landowners are not afraid of a bird on their land, but what they are afraid of is the feds on their land. And if you penalize people for doing good things, for having a habitat on their land and so on, they'll stop doing that, they'll find ways to sterilize their land. And I think that's been the sad consequence of this Act.

MARGOT ADLER: Michael, has the Act saved species from extinction?

MICHAEL ROBINSON: Absolutely, it's saved many species from extinction. Let me give the example of the Mexican grey wolf, which is a subspecies of grey wolf that lived on the border lands of Arizona and New Mexico, along with the Sierra Madras of Mexico. U.S. Fish and Wildlife Services extermination program resulted in wiping out all the grey wolves in the western United States by 1945. Starting in 1950 the U.S. Fish and Wildlife Service sent American salaried personnel and American-produced poison to Mexico to duplicate the program south of the border. And it was very successful. Fewer and fewer Mexican wolves crossed over into the United States. In the late 1960s the two predecessor laws to the Endangered Species Act essentially gently told the U.S. Fish and Wildlife Service, please stop wiping out species and conserve them instead. And the Fish and Wildlife Service continued to kill the very last Mexican wolves, both in Mexico and crossing over into the United States. And the result was that when the Act was signed by President Nixon on December 28th, 1973 and a team of people were sent within a few years to Mexico to capture the last remaining Mexican grey wolves for an emergency captive breeding program, they were only able to find five animals, four of them male, one of them female. And that is the genesis for the entire species. None have been confirmed alive in Mexico since then. And we have a success story. That's one of hundreds of species that is in the world today, contributing to the tapestry of life, the beauty that's around us, thanks to the Endangered Species Act.

MARGOT ADLER: How many species do you believe have been saved by the Endangered Species Act?

MICHAEL ROBINSON: It's impossible to come up with an exact number. There are about 1,100 animals and plants that are listed as endangered or threatened under the authority of the Endangered Species Act. And over 99 percent of the animals and plants that have been listed are still with us today, and the very few species that have gone extinct have generally been those that were afforded the protections of the Act at the very last minute, when there's, you know, ten organisms left of this particular type of creature, when essentially it's on the verge of being too

late or indeed is too late. So for the ones that have been given timely protection as endangered species, there's pretty much a 100 percent success rate.

MARGOT ADLER: R.J., 108 U.S. species are known to have become extinct in the first 21 years following the creation of the Endangered Species Act. Twenty-three species became extinct after they were placed on the endangered species list. Environmentalists argue that incompetency, foot-dragging, purposeful delays from the U.S. government were responsible for some of these extinctions. How would you argue about that?

R.J. SMITH: Well, I would argue that the purpose of it is to stop species from continuing go downhill, to decline in population. And they decline for lots of reasons. They decline and disappear for natural reasons, because of new competitors, because of changing habitat and so on. I think Michael's selection of one top-end predator, the grey wolf, is certainly not characteristic of the vast majority of all the species that are on the endangered species list. The latest data, as of June 6th, is that there are 41 species that have been de-listed, taken off the list of some 1,400 endangered plants and animals. Of those 41, nine went extinct, which is not a success story, 25 were what is called original data error.

MARGOT ADLER: What does that mean?

R.J. SMITH: That's means that they have listed something because they wanted to stop a project or a development and it was going to harm this little species here or harm that or they thought this species was imperiled and so on, and so they put it on the list. And what we do very often, more often than anything else, we find that once something has been listed people go out then and they have millions of dollars of federal monies to do population studies and they find out whoops, it never should have been listed to begin with. They are all over the place or nobody looked on the other side of the mountain or nobody did a search in this swamp. And so then they're taken off the list for what's called original data error. There were four other species that were taken off the list which the federal government says were recoveries: the two populations of Peregrine falcons, the brown pelican and the grey whale. But those all recovered for reasons other than the Endangered Species Act. Remember we used to use a lot of DDT and that caused birds like the Peregrine falcon to lay eggs that wouldn't hatch, because they laid thin-shelled eggs. Once the EPA banned the use of DDT in 1972, before the ESA was passed, and then the private Peregrine falcon started breeding Peregrine falcons in captivity and releasing them all over the country, this quickly recovered.

MARGOT ADLER: I'd like Michael to respond to that. Do you agree with his argument?

MICHAEL ROBINSON: No, absolutely not. I mean, there are hundreds of species that have stabilized their population and started going up. One of the beauties of the Endangered Species Act is that it's not a cookie-cutter approach. It's based on the specific biological needs of the animal or plant in question, and recovery plans are tiered to those specific needs. A recovery plan states how long it will take for a species to recover, and typically it's decades. So with the expectation that somehow we're going to list a species that's down to perhaps only a few hundred creatures and within a handful of years it's going to be recovered is simply the wrong standard to be using. And it's not just the large charismatic species that have benefited.

MARGOT ADLER: Part of the proposed changes as I understand it deals with eliminating the critical habitat rule. And this rule requires biologists to map out the length of land the species might need in the future. If you're going to protect a species, don't you have to protect its habitat, even if it encroaches on private property?

R.J. SMITH: Its habitat, yes, but we do have something called the Constitution of the United States, and the fifth amendment says nor shall private property be taken for public use without just compensation. Go ahead if you want to protect it on private property and tell a landowner that he can't harvest any of his trees or use his water or build a home on his land, but then he should get compensation. But the point there is that we've had this continuing problem from day one that we have penalized landowners. We have put all the burden on them and what we usually do is spread the burden across all of society, so that taxpayers pay for it rather than make one individual pay for the entire consequences for the piece of legislation.

MARGOT ADLER: What do you think about the critical habitat rule?

MICHAEL ROBINSON: First of all, critical habitat is absolutely essential to recovery of species; animals and plants need homes to live on. A peer-reviewed study published in the Journal of BioScience indicates that animals that have critical habitat designated for them are approximately twice as likely to be moving toward recovery, to be on an upward trajectory, than those without critical habitat designated for them. It stands to reason that if you cut down a tree that a bird is nesting in it will fail to reproduce and the population will continue to decline.

MARGOT ADLER: So how would you answer R.J.'s issue that if you're going to have critical habitat, how do you compensate the landowners who are prevented from developing land because of endangered or threatened species?

MICHAEL ROBINSON: Well, typically it's a very small percentage of land that's set aside, and really what he's asking for is the equivalent of just allowing big polluting companies to dump toxins into the water on the grounds that we own the area alongside the stream. You know, you can't have a meth lab in a neighborhood because it's going to, because, you know, on many levels it's going to impact the community at large. And we have a community interest in conservation, of having the beauty of life passed on to future generations. And we're not talking about total takings of land. In fact, courts have not ruled that the Endangered Species Act is unconstitutional. To the contrary they have ruled that it's entirely constitutional. But we have to look at the public lands that are being abused because of special interests where critical habitat has made all the difference for the desert tortoise, for the Southwestern willow flycatcher, for many other creatures out there.

MARGOT ADLER: Now R.J., I want to ask you what you propose should happen to landowners who are prevented from developing their land, and does the government have enough money to fully compensate landowners?

R.J. SMITH: I think absolutely. Look, the first thing is that what we're mainly talking about here is small landowners, small family tree farmers, small ranchers, family ranchers, small farmers

and so on, that we're not talking about the so-called big polluting companies that Michael mentioned. This is not a problem for them at all and this has nothing to do with the compensation sections and titles within Richard Pombo's bill or those that are being considered in the Senate. They have nothing to do about it and they get nothing. What this has to do if you're a tree farmer in South Carolina and you have 200 acres of loblolly pine trees that were planted by your grandfather or your father and it turns out that off your property line there's a red cockaded woodpecker nesting in a tree on someone else's property, the feds come in and say sorry you're within the quarter-mile radius circle of where there's a red cockaded woodpecker and you cannot harvest a single tree on your land and also, too bad, you won't get any compensation whatsoever.

MARGOT ADLER: Michael, there are now 6.5 billion people on the earth. Given that the human population is continuing to grow, is it realistic to assume that we can prevent the extinction of more than a thousand or so species listed in the Endangered Species Act?

MICHAEL ROBINSON: We can prevent their extinction, absolutely. What it takes is a little wisdom along with our growth, the wisdom to decide that certain areas do need to be restored to their natural condition, as rivers in the southwest on national forest lands that really don't need to be grazed, or deserts in Southern California that don't need to have off road vehicles driving all over them. So that creatures that need quiet, like the desert tortoise, or creatures that need nesting habitat like the Southwestern willow flycatcher can survive. It's not always going to be easy. There's always going to be some level of conflict between people who want to continue to do things the way they always have and those that are looking more in the long term, but our public lands are vast enough—that's part of the legacy of many different administrations, including Teddy Roosevelt's administration—that there are these vast wild areas that if we manage them wisely can be home to a myriad of creatures. And there are creatures of course on the private lands as well, and the Endangered Species Act at present does represent a balance in which there are portions of private lands on which you're not allowed to dredge a river or build condos. But most of the private lands of any given private landowner are open to development. So will that balance be easy? Of course not.

MARGOT ADLER: R.J., people talk about our ecosystem as a fragile latticework; if one part breaks it's unclear how it might affect the rest of the system. It might do nothing. It could start a domino effect with larger devastating implications. Should we do everything we can to protect each piece?

R.J. SMITH: Yeah, I think you raised a very interesting question about the ever-growing, burgeoning human population on the planet and how do we save as much biodiversity and wildlife as possible. And I think the one thing that we have to do is realize the mistakes that we've made in the Endangered Species Act and particularly all the perverse incentives. If you penalize landowners for attempting to do good things or for having habitat on their land that endangered species would use who were there, landowners will sterilize their land and will stop doing good things. I mean, that's been the flaw in this Act. And you can create a win-win situation. All you have to do is remove these perverse incentives. Stop penalizing landowners; stop taking away the use of their land.

MARGOT ADLER: R.J. Smith is an adjunct scholar in environmental policy at the Competitive Enterprise Institute. He's the author of "Earth's Resources: Private Ownership vs. Public Waste." Michael Robinson specializes in carnivore conservation at the Center for Biological Diversity, and he works to save wolves and jaguars. He's the author of "Predatory Bureaucracy: The Extermination of Wolves and the Transformation of the West." Thank you so much for being on the show.

MICHAEL ROBINSON: Thank you, Margot.

R.J. SMITH: Thank you, Margot.

MARGOT ADLER: Coming up, we'll hear about one reporter's passion for a giant bird, the endangered California condor.

UNIDENTIFIED MALE: I will remember that sight and that sound really, the sound of the wind in those amazing wings forever. I mean, we should keep the condor just to preserve that sound.

MARGOT ADLER: One big bird in America and its story of survival; stay with us.

MARGOT ADLER: This is Justice Talking. I'm Margot Adler. We heard how the Endangered Species Act can sometimes cause complications for property owners whose land is also habitat for endangered species. One California rancher knows this all too well. Kenny Watkins is vice president of the California Farm Bureau Federation. He runs a cattle ranch and farm in Lyndon, California. He says that one endangered species, a microscopic fairy shrimp, has restricted his ability to develop his land. Thanks for talking with me.

KENNY WATKINS: It's good to be with you.

MARGOT ADLER: When did you first realize that your property was home to a protected species?

KENNY WATKINS: Oh, I don't know, I guess it happened a few years back when a lot of the grapes did start growing in this area and core engineers and fish and game came out and started fining some of the people who were putting them in for destroying some of the vernal pools.

MARGOT ADLER: The vernal pools, what are those?

KENNY WATKINS: It's a depression in the ground that holds water where fairy shrimp and specific plants that are on the threatened and endangered species list live.

MARGOT ADLER: Now how big are these pools?

KENNY WATKINS: They can vary in size from a tire track to an acre pool or two acres.

MARGOT ADLER: Tell us about this shrimp. First of all, is it big enough to see?

KENNY WATKINS: Not really, not without a microscope. How small is it? It's pretty small. It's pre-historic, it survived the Ice Age, and the way we understand it, everywhere here where water stands they're in the soil and they come to life, whether it's a tire track, a county road along the ditches. They've even found them in old tires thrown on the ground that catch water. They've shown up in those...pretty prevalent all over this area.

MARGOT ADLER: If there are so many of them why are they endangered?

KENNY WATKINS: That's the big question. We don't quite understand. And that's the whole reason for updating and modernizing this Endangered Species Act, so that when the new science comes out that we can adapt and move forward. What we have now, we're stuck with the rules that were written and we can't use the new research that changes over time.

MARGOT ADLER: Now how would you describe the problem?

KENNY WATKINS: It forces people out of agriculture. Now here in my own situation, on this one piece of property, there's 640 acres that's zoned, 40 acres minimum. So right now we're running cattle on it and grossing about \$80,000 a year. I could today go down to the county and divide it into 40 acre parcels and sell it off and get over \$8 million for it. But if I could take and develop it for vineyards or orchards me and my family would be able to derive an income from our asset. But with kind of the way this Endangered Species has got us boxed in right at the moment we might have to make the business decision and sell it, take the money and invest it somewhere else for future generations.

MARGOT ADLER: And what have you done to fight this?

KENNY WATKINS: Well, personally I've made numerous trips to Washington, D.C. and spent a lot of time talking to legislators about how this affects me personally and our area.

MARGOT ADLER: What would you like the government to do?

KENNY WATKINS: Well, you know, last fall 410 congressmen voted to do away with critical habitat. That is huge. And now we have it stalled in the Senate. We just want to make this a workable plan for all of agriculture and the community and the environment; we're not out to destroy all the habitat and all the endangered species. If we're going to do it we want to do it so it's productive and if we can remove some of these animals from the endangered species list. You know, in the western United States over 50 percent of the land is owned by the government, yet 90 percent of endangered species are on private property. So that's got to tell you that the landowners are the ones that take care of the endangered species, not the federal government or the state government.

MARGOT ADLER: Thank you so much for talking with me.

KENNY WATKINS: All right, thank you.

MARGOT ADLER: Kenny Watkins is vice president of the California Farm Bureau Federation. He runs a cattle ranch and farm in Lyndon, California.

In another area of California an endangered species is making a come back, the California condor. Once on the verge of extinction the condor is multiplying. To talk about the survival of the condor is John Nielson, NPR's environment correspondent. He's written a book called "Condor: To the Brink and Back—The Life and Times of One Giant Bird." Welcome to the show.

JOHN NIELSON: Nice to be here.

MARGOT ADLER: First of all, could you describe the condor for us, what it looks like.

JOHN NEILSON: Yeah, on the ground or in flight? Well, both. When it's on the ground it's got black feathers that are huge. I mean, the feathers at the tips of the wings on a condor are two feet long, which is longer than most whole wings on birds.

MARGOT ADLER: Now it looks kind of creepy, right?

JOHN NEILSON: It's an acquired taste. When they're standing on the ground they have this kind of Greta Garbo thing going with a fluffy ring of feathers around their neck and a kind of get away from me look that they give you. And they have reddish leathery scarred heads and eyes that are completely red and a big razor-sharp, I mean razor-sharp beak, and kind of, not spindly, but certainly not attractive yellow legs. And when the wings are folded around them they just, they don't look all that exciting. But when they're flying they spread their wings out completely straight. Other birds, other vultures, will use what's called a dihedral, sort of a V in the sky and they wobble around. Condors do not wobble on the wind, they sort of own the wind and they will rise on the thermal, the hot air that comes up off the ground and they have such command over these thermals that they are able to literally stop in mid-air.

MARGOT ADLER: So you actually saw them then.

JOHN NEILSON: I had a really amazing experience one time. I was very, very lucky. I was standing near a cliff in the Sespe Condor Sanctuary near Piru where I live, that's the name of the little town, and I was actually up there for NPR doing this story, and I hope you'll pity me for this Margot, but I was changing the tape, you know, I had the cassette out, I was turning it over and I heard this roar. And I turned and took a half a step and a full grown condor that was being chased by two smaller falcons who were defending their nest just went blasting right up through my field of vision and it had used the cliff as a kind of sling shot. It had caught the rising air current and it just shot up past me, no more than 10 or 15 feet away, up towards heaven. And I will remember that sight and that sound really, the sound of the wind in those amazing wings forever. I mean, we should keep the condor just to preserve that sound.

MARGOT ADLER: Now give us a brief history, the life of the species. How many were there 150 years ago, how many 20 years ago, today and so forth.

JOHN NEILSON: You know, the condor has been around for a very, very, very long time and it's range has been gradually diminishing. But the biggest hits that it took, the biggest threats to it came after the Gold Rush when, you know, the population of California exploded when all of the Europeans arrived, armed to the teeth, and condors were shot and their eggs were collected and they were poisoned by ranchers who thought incorrectly that they flew off with live calves. And their habitat was used up, you know, later just by people building suburbs and things like that. And the numbers just shrank and shrank and shrank, and they got down to the point where by 1986, I think there were only two of them left in the wild.

MARGOT ADLER: So where are we now? They've been reintroduced into the wild and where are we with them?

JOHN NEILSON: We are not at the phase where we can declare the condor saved. And unfortunately I think that that is kind of a preview of what's going to come for a lot of the big famous animals around the world that we basically may never get to that phase. We have a very healthy condor population that is now found in Big Sur, southern California, Baja, California, parts of Arizona and Utah, but it has to be intensively managed. They have to give them blood tests to look for lead poisoning, they have to keep them away from people and, you know, it's one of those things where it's not exactly a wild bird anymore, but it is a condor and, you know, that's better than no condor.

MARGOT ADLER: And what is the greatest threat to their survival, lead?

JOHN NEILSON: Lead that's found in carcasses shot by bad hunters who leave the carcasses where they fell. I'm trying to make a distinction between bad and good hunters here.

MARGOT ADLER: In other words, the good hunters are...

JOHN NEILSON: The good hunters clean up the mess, you know, they just don't cut the head off and take it home as a trophy, as sometimes happens. The condors will go and find these carcasses and they will, by some accounts, just pick out the lead pellets because they think they're bone chips and they need them for calcium, and then they get lead poisoning. And if they get it bad enough they just literally fall out of the sky. I mean, we've had a number of incidences where several condors at once have gotten very, very ill, and they take them into the zoos and the zoos give them this painful treatment called kelation. And then they put the condors back. And actually, by some accounts, if the zoos hadn't been around to treat these birds you wouldn't have any left, because they would all be dead.

MARGOT ADLER: And how many do we have now? How many condors are there in the United States?

JOHN NEILSON: Did you have to ask me that?

MARGOT ADLER: Well, approximately.

JOHN NEILSON: Approximately 200 plus overall, that means in and out of zoos. And the birds have begun laying eggs again. They have had a couple of fledglings actually take flight again.

MARGOT ADLER: Will they ever be utterly wild again?

JOHN NEILSON: I don't know. Nobody knows. And I don't think that should be a condition for continuing to try to save them, you know. I think it is a condition of the Endangered Species Act that there be something called recovery at some point, but that's such a loosey-goosey phrase, it means so many things to so many people that, you know, I think that this is one of these laws that has a moral obligation attached to it. Maybe it wasn't attached to it by Congress, but if you see a condor in flight, if you are ever so lucky, you'll know what I mean. You'll know that the reason you want to save these things is because they're still there.

MARGOT ADLER: John Nielson covers the environment for National Public Radio and is the author of "Condor: To the Brink and Back—The Life and Times of One Giant Bird." Thank you so much for joining us.

JOHN NEILSON: Thanks for having me.

MARGOT ADLER: It's not only animals that are on the endangered species list. Of the more than 1,300 species listed as threatened or endangered under the Act, more than half are plants. One of the protected species is the Texas wild rice plant. Flo Oxley spends her time trying to save it and other plants. She is director of education and conservation at the Lady Bird Johnson Wildflower Center, a botanical garden in Austin, Texas. Thanks for joining us.

Most people think of animals when they think of endangered species. Does that make your work harder?

FLO OXLEY: On some level it does. And let me tell you why. It's that animals are lucky in that they have what they call charismatic megafauna; that is, you've got the big brown eyes, you've got the big wet nose, it's very familiar to you. They're furry. They're like your dog or your cat at home. And plant biologists do not typically have a charismatic megafloora. Nobody thinks about hugging a puzzle sunflower, okay?

MARGOT ADLER: Right.

FLO OXLEY: So what's interesting about that kind of situation is that people relate to the animals. It's familiar. But when you ask somebody, at least when I do, when I go out and give talks about endangered plants, I ask people what makes animals endangered? And they will say to me well, it's the loss of habitat. And then I'll say what makes up habitat? And then the light bulb kind of goes on over their head and they say oh, plants.

MARGOT ADLER: Now give an example of an endangered plant species that you work with?

FLO OXLEY: I work with a really cool plant called *Zizania texana*. And that's Texas wild rice. This is a plant that occurs in one place only and that's in the San Marcos River in Hays County, Texas, nowhere else in the world. It has a number of cousins, but *Zizania texana* occurs only in the San Marcos River and only in about a two mile stretch of that river.

MARGOT ADLER: So if it's endangered I shouldn't ask you how it tastes, right?

FLO OXLEY: Well, I will admit to you, Margot, that I have eaten my babies. And it's quite good. And we all know that the commercially-farmed wild rices do have very, very high nutritional value, although I don't know of any studies that have shown that Texas wild rice has high nutritional value, although we think it does because the wildlife will eat that before they'll eat anything else. In fact, they call it an ice cream plant.

MARGOT ADLER: Now how did it become endangered?

FLO OXLEY: Well, old records that talk about the plants along the San Marcos River talk about it being throughout the length of the river, quote-unquote, from bank to bank and in the ditches along roadside. And, in fact, roadside managers in the city of San Marcos were actively weeding it. It was a problem. But in the 60s and 70s there was a booming aquarium plant farming trade down in the San Marcos River and they were actually removing the rice to grow aquarium plants that could then be sold to pet stores and aquarium shops. And that did two things. First of all it removed individuals from the river and it introduced non-native invasive species that we're still trying to deal with to this day. Now there are thousands of plant species and probably most of them Americans have never heard of or seen.

MARGOT ADLER: Why do you think it's important to preserve a plant that the average person is going to think is a weed?

FLO OXLEY: Well, if you were here I would be standing in front of you stomping my little foot and going "because"; because they have inherent intrinsic value, because they've been here a long time. And the bottom line is that for the most part we don't know what those plants do or have to offer to humans.

MARGOT ADLER: In other words, some day we might discover that one could be a medical cure or something else or...

FLO OXLEY: Well, you know, who knows? Texas wild rice, and I'm just throwing this out as an example, it could be the food source that saves, that, you know, feeds the world, we don't know. Taxol—the Pacific yew is a plant that was considered to be very much a trash plant and was being actively removed by land managers. Well, Pacific yew has that cancer-fighting drug called taxol. So we don't know what plants out there have to offer to us, we just don't know. And one of my very favorite quotes is by Aldo Leopold and it goes that whenever you tinker with nature, save all the parts, because you just don't know what you might be tossing aside. And, of

course, there's the old, you know, the old saw that extinction is forever, I guess. That's right, extinction is forever. And once something goes away, we can never get that back, ever.

MARGOT ADLER: Flo Oxley is director of education and conservation at the Lady Bird Johnson Wildflower Center, a botanical garden in Austin, Texas. Thank you so much for being on our show.

FLO OXLEY: Margot, thank you so much for asking me. I really appreciate it.

MARGOT ADLER: Tell us what you think about the Endangered Species Act. Is it time to loosen the Act's regulations? You can share your thoughts on our website justicetalking.org. While there you can also listen to past shows or sign up for the podcast of our show. Thanks for joining me. I hope you'll tune in next week. I'm Margot Adler.
