

Interview with Mary O'Brien on Thursday, April 23rd
Conducted by Marla Waters with the help of KZMU Moab Community Radio

Interviewer (I): We can start out with you introducing yourself that would be great:

Mary O'Brien (MO): I'm Mary O'Brien and I'm actually here in the southern Utah, in the Moab area, southeastern Utah, and for the last 12 years I've been working as the Utah Forest Program Director with Grand Canyon Trust which is Colorado Plateau regional conservation organization working on a lot of issues, energy, Native American issues of economics, wilderness of course the Grand Canyon itself protection. And here in southern Utah I work a lot on issues of management of the three national forest that are in southern and central Utah which is on the Colorado Plateau and some Bureau of Land Management land such as Grand Staircase Escalante National Monument so I no longer work in Utah, excuse me in Oregon, but I did work from 19... this is going to sound like a long time ago for some people... from 1983-1990 I was the staff scientists for Northwest Coalition of Alternatives to Pesticides, eventually leaving Oregon briefly to teach at University of Montana, and came back and worked with Hells Canyon Preservation Council. And around that time I helped encourage Lisa Arkin actually to help start a statewide pesticide group Beyond Toxics, not just pesticides, toxics in general and so I feel like the baton was passed to an extraordinarily articulate, and passionate, and strategic women for that job.

I: In your work with NCAP or the work you are doing now, have you had any experience working with pesticides and pesticide reform?

MO: Yeah, well the years I was working with Northwest Coalition for Alternatives to Pesticides or NCAP a lot of our time was being spent on getting the forest service to stop aerial spraying of herbicides. And it really was an amazing process of a lot of citizen groups in Oregon, Washington, and Northern California, and ultimately it really was quite successful, particularly when the courts intervened and told Oregon and Washington forest service in region 6, which covers Oregon and Washington, that they really couldn't continue any herbicide use, aerial or ground or experimental or anything until they developed a new 'environmental impact statement' (EIS) under the National Environmental Policy Act. The wonder of NEPA, the National Environmental Policy Act, rules that the agencies, any federal agency doing any significant project, a project with any significant impacts needs to consider alternatives of course that was in the name of Northwest Coalition for Alternatives to Pesticides because there really are alternatives for nearly all uses of pesticides and because the courts said 'ok stop, pause, no spraying and do a new environmental impact statement' and at that point we pretty much wrote a "least herbicide use alternative", in other words it's wasn't never ever use herbicide but

here are the ways to ratchet back and ultimately that's the alternative that forest service chose and that took a long time it took over 10 years that whole process and that can sound awfully long for what should be a rather simple decision but it isn't when people, agencies, companies, industries when they've gotten in the habit into using herbicides they're afraid to get off them, their addicted and it's pretty alarming this last couple years to hear of a replay of all of that on the private forestry lands in Oregon. You would just think that we were past that, and there was so much evidence of so much harm of the herbicides and so much evidence that they weren't needed to grow trees, it's pretty amazing that Oregon's State Forestry Practices is so behind the times because that can sound like a long time ago, 1990, and here we are in 2015 and in the private lands, private forestry they still have not got off that addiction.

I: What do you think would be needed to spark that change? You worked through it during the public sector, what is needed in the private sector? What is going to be needed to get the changes that need to happen?

MO: I think there always has to be a two-pronged effort. There has to be the concerns the reason why this is a bad idea but there always needs to be here's the clear evidence alternatives can work whether you're looking at what other states have done, whether you're looking at better results with alternatives to herbicides, I always think it's very much a personal issue that you need to turn up in the offices of decision makers and talk with them, see if they can go out in the field. We are all people and story people, we're are not as rational as we sometimes think we are and I think all changes are made by personal relationships and in person discussions and presenting better alternatives and its interesting I long ago in the sense of full time work on pesticides left that behind to be working on other issues but just this last month had a little success here with the forest here right around Moab Utah that was going to use a very nonspecific herbicide Tebuthiuron to kill Juniper in the Pinyon-Juniper Woodlands to prevent fire around private inholdings in the forest and in the last year we presented evidence that it wasn't a good idea, it wasn't needed and the decision was ultimately to not use the herbicide so and I had to smile because it was so long ago that I was doing that in Oregon and here had a chance again to bring alternatives to the forest service here in Utah so many years later. But I think that one of the difficulties working at the state-level is when you were working with the federal agencies: the forest service, or BLM then they have to consider alternatives through the National Environmental Policy Act, which is one of the best laws our nation has. But the state of Oregon does not have what some states have, is a little state environmental policy act which requires similarly that you look at alternatives and you consider the environmental and social drawbacks and benefits of the various alternatives and unfortunately Oregon, like Utah, is one of those states that doesn't have

that process where if you are an agency a company or a state that is kind of stuck in herbicide use that you have to consider alternatives that are brought forward so its tough because I don't know the details of why it (SB 613) went down in the Oregon legislature. But you can't go away, it can't continue the aerial spray making people sick, making wildlife sick. Its one of those issues like climate change or, I work a lot on really poor livestock grazing on federal lands you just, however hard it is to get the agency or state to change they have to so I have always taken the position that when I'm trying to change something it will change and if you lose in the legislature this time you regroup and figure out what, why, did it not pass and what's needed now. You just don't walk away.

I: That's a great mentality to have

MO: I think that years ago I learned that from some of the environmental lawyers where we were doing cases on aerial herbicide spraying also we were doing aerial insecticide spraying, when Gypsy Moth was an issue in Oregon and I would see them maybe lose at a district court or maybe lose at one particular case and it wasn't a half an hour later they were starting to analyze what they were going to do different the next time and I've always thought that's they way it's got to be. You get knocked down and you bounce back up. Simply because it's wrong to manage the world by poisoning it and I've always been one really didn't need a disaster for me to happen or to my children or a person I know to realize its is no good for any living beings on earth. That's just not the way you treat your fellow species, it's not the way you treat children it's not the way you treat anything.

I: So you said there was no tragic accident that brought you into this line of work. What did spark you getting involved with NCAP and these environmental issues?

MO: Well that's a good question. I think that when I came to Oregon I was just finishing my doctorate in botany down in Southern California and my husband had just gotten a job in the Sociology department in the University of Oregon and so we got a newspaper to see what houses were for rent or for sale we were going to be moving up with our two little boys. On the front page of I believe it was the *Register Guard* there was a full color picture of a lot of people in the school district at a school board meeting and they were protesting herbicide use in the schools and apparently it was just a packed meeting and I thought "wow this is a great community to be moving to. There's people that aren't gonna sit by while unnecessarily harmful things happen." Well I didn't immediately get involved in pesticide issues but all I had to do to finish my doctorate was write my dissertation which I knew I was gonna do it in a year and I had time to volunteer and for

a while I volunteered with a peace group this was around the time when issues of cruise missiles and ratcheting back on nuclear arms was a big issue. But upstairs in the growers market, across the hall from the peace group was the Northwest Coalition for Alternatives to Pesticides. And I thought well I could volunteer for them too and went and asked if they needed a volunteer.

MO: Oddly enough they didn't call for six months and ask me to write an article, to go interview a farmer, near Eugene, on how he was managing without herbicides and that's actually what got me started. Just about that time there was a woman who started kind of a guidebook for citizens on understanding pesticides the common names, the chemical names, how is they can cause cancer, how is that they can cause birth defects, what are the different classes of pesticides and she hadn't finished the book and it was for NCAP and she was going back to Oregon State University to get a forestry doctorate and they said would you finish this book? And I of course knew very little about pesticides. Of course this is hard for you to realize but I actually went into the University of Oregon library and looked up in the card file under P for pesticides and started because computers just weren't around to do internet searches. And I spent the next year in the University of Oregon library learning about pesticides and by the end of the year re-wrote what she had started and it was called "On the Trail of a Pesticide" and by the end of the year I knew enough about pesticides to be of help to citizens because of course when citizens are suddenly faced for the first time with some awful situation where pesticides have caused a problem, or might cause a problem, or seem unnecessary they're up against not only the corporations that sell the pesticide and are pretty much snake oil salespeople a lot of the time but also the school districts or the county or the state or the federal agency that's use to using them and so they suddenly have to become knowledgeable what is this common name, what is this brand name what's an inert ingredient is an inert ingredient inert, why do some pesticides they say are carcinogens others they say cause nerve damage, how does that happen? It was a great year, I did it for a thousand dollars that's what they had in their budget and I was fortunate my husband was teaching at University of Oregon we had a roof over our head and food on the table and for a thousand dollars I spent the year in the library learning about pesticides and then I was off and running for the next seven years with NCAP.

I: In your work now and in the pesticide field what would your vision of change look like?

MO: I think it's always looking around to see if we can do better. I mean one of the things I did in the process of learning about toxics and pesticides and risk assessment: that is the supposedly scientific method of figuring out how much pesticide you can be

exposed to in your food or how much you can be absorbed through your skin or how much a child can drink in water and not experience a particular disease or whatever. Its really asking the wrong question, the very wrong question, the right question is not how much pesticide is ok to use but how little needs to be used and that's really what I work with in all my environmental work. Whether its grazing or forestry, logging, or roads on public lands it's always 'what's the least that we need to do, and what's the most attractive way to package alternatives' and that's the kind of change I think we always need to aim for is how much better can we treat the world and each other and no matter what environmental issue you're working on, whether its an environmental justices toxics issue pesticide issue or climate change or well like I work on livestock grazing, or any environmental issue it's think out the world that's feasible and possible that could be and that's what you put your eye on and you figure out how to get that installed. I think it's really exciting a lot of the youth movement around in universities and colleges for divestment from financial investment in fossil fuel industries and there's a real push to invest instead in alternatives and there's a positive picture and it isn't just despair and railings about climate change it's here's an alternative way we can fund how we get and use energy in the world and so its a very positive here's a different route we can take. And in the case of pesticides there's nearly always a different route that can be taken.

MO:And I know there's a question I'll often get asked is 'well is there never any use for any pesticide'? And I would say actually if there's a pesticide that's gonna be used to re-set a system that's gone awry because of poor management and once that's system has been re-set in some way it's going to function naturally on its own and there's really no known alternative. Lemme give an example: here in Utah Cutthroat Trout various types- Greenback, Colorado, Bonneville cutthroat trout species are in trouble and are in trouble a lot because years ago non-native introduced into the streams and they are out competing the cutthroat trout and the cutthroat trout are losing and there is a way to briefly poison that stream put up a fish barrier so that the native fish can't get back up and it's a way to restore cutthroat trout which are native. And it doesn't have to be done and done again, and again, and again, and it doesn't have to be repeated in years you can restore a stream to the native cutthroat trout and the various aquatic species bounce back pretty quickly through the networks of water in the mountains and that's an example of one where I'm actually ok with a pesticide being used because different alternatives that have been tried--the electrofishing, the netting, whatever just hasn't worked and those cutthroat trout are going out of existence. So it's a question of: can we do better? is there an alternative?, and most certainly if a pesticide is being used is it only being used as a one time deal to reset a system so it can then be back on its feet and functioning. 30:00 But something like chemical pesticide driven agriculture for food is clearly not necessary if the organics are clearly functional and better not only for the

consumer but for the birds and the bees and the workers in the field and the earthworms and everything all around. So that's a really unnecessary use of pesticides. And we can currently grow trees without herbicides that are a really unnecessary use.

I: What would you say to someone who had the opposing view? What would you say to someone who says that it is more cost effective to use herbicides or why does it matter that we care about the birds and the bees and that sort of thing? Have you ever had those kinds of conversations? And what would you say to someone?

MO: Well I think that it is different for different people because there are different reasons people will deny that pesticides are a problem. You really need to know where they are coming from. What do they know? What are they afraid of? What are they making their money doing? Why? For instance there's an interesting study on why are there climate change deniers? And in this particular study, it was showing that it tends to be people who don't want government making rules or regulations and that if they believe that climate change is happening that probably means something like a carbon tax or limiting by regulation the emission and use of fossil fuels. So hence they deny that the climate change is really happening. So isn't really a matter of arguing on scientific grounds that climate change is happening if you can't deal with the real reason for why they are denying pesticides use is a problem then you can't really fashion an alternative for them. So I think that you should always need to know about what does that person care? What do they fear? Do they fear the loss of their jobs? Let me take an example, there was a time when the parks in Eugene were pretty reliant on using herbicides for all kinds of things in the lawns and one of them was to get rid of English Daisy and it came about as we talked with the park managers and so on. They really have been taught if they are good grounds keepers, everything looks green and nothing's weedy is in there. And so one of the managers said ok I'm not going to use herbicides and people are gonna complain about all the English Daisies in the lawn and then I'll have an excuse to go back to using the herbicides because that's how I can please people. Well it turned out that people didn't mind the English Daisies, they commented how nice they looked. And he was like huh maybe the way I have been taught how to keep grounds isn't the only way.

MO: So I think it's always important to find out whom you're talking with and what are their perceptions? What are their feelings? What is their sense of self? I mean it was really hard when we were trying to get integrated pest management in schools in Eugene. And again the groundkeepers of the schools thought they were doing what they needed to do to keep pests out, to keep weeds out. They thought they were doing their most professional job and here were some anti-pesticide people telling them they were

bad people essentially that was how it felt to them. Well let's just try some alternatives see if they work. If they don't then we will talk further and we eventually got to a good place with the schools. And the parks. And of course, Beyond Toxics is just a fabulous organization for taking a really personable relationship with legislators, with people who use pesticides and so on, so that they can work out alternatives. But you can't just tell people that they are wrong, you can't tell them the bad, you can't tell them that they don't know anything, but you can learn enough about them to bring them some stories that make sense to them.

I: Exactly that is what we are trying to do. We are trying to figure out a way to work with people so that they realize that pesticides are unnecessary and there are other ways to do those jobs.

MO: Well on one of the best things is bringing people from other states where they are not doing this kind of herbicide aerial spraying. There are other states that have better rules. Who can you bring from those states to be talking about how it's working there because often time's people resist change in part because they can't imagine what they would do differently. But if you can bring someone to them that they relate to, another state forester, another farmer, another rancher, and another silviculturist who says 'no, we can do things differently'. That's the best, and it's honoring that they are trying to be good professionals. But we all react badly if we are told we are bad.

I: Do you have any advice for people who want to get involved in the issue?

MO: Well I think the best advice is to go a group you trust, like Beyond Toxics, or Pesticide Action Network, or Northwest Coalition for Alternative to Pesticides. Go to a group because they spend all their time thinking about the issue, they know the scientific literature, they know the agencies, they know the rules, they know the laws, and you don't have to reinvent the wheel. That's what NGO, Non-Governmental Organizations, civil societies exists for to help fellow citizens win their way through bureaucracies, legislatures, and laws, and outreach, and public service announcements, and organizing meetings they will help. I think when I see people get the most discouraged, and the most embittered is when the tried to make change on their own and in the case of pesticides, you're up against corporations, you're up against agencies, you're up against people who are afraid, people that politically are being ideological, you're up against a lot. And you can be somewhat of a tilting at windmills if you try to do it all yourself. And I think that it is one of the glorious things about environmental work. It's very fun to work with other people who care about toxics and care about a better world, and see a better world, and care about alternatives. What makes... I mean you are

working with the best people in the world. You're working with people who are working overtime. They're working for a little money. They're working for just the passion of taking care of the world and that's the best company in the world to be around. So anyone who wants to get involved in pesticides because they are concerned of an issue really needs walk in the door make an appointment, call ahead, whatever, and sit down with somebody like Lisa Arkin or her staff and say how can I help? Or here's what I'm concerned about. Or my son is sick, was sprayed, you really got a leg up if you are through an organization that does that 24/7 has been doing that for years. And of course they love to see you walk-in because you're one more person that's there to help make things better for the world. So it's a mutual benefit. They need you, and your voice, and you can always use their advice, their information, and their connections. It's a great relationship. Of course, that's me I've worked within NGO's for 35 of years now. And it's just a wonderful generous, helpful world.

I: One thing you mentioned is when you talked about risk assessment. I understand you wrote a book Making Better Environmental Decisions. Can you tell me a little more about that book? And also just expand a little bit more about risk assessment for those who might not know what it is exactly and how it relates to pesticides?

MO: Risk assessment is a process to use to justify bad things. So somebody in the inner city complains about a hazardous waste dump near them, or a medical incinerator and whoevers defending that incinerator that waste dump will trot out that complicated set of mathematical formulas showing that really you're not going to be harmed by that. But it's all a house of cards. And I give really good examples in that book. The book is filled with stories. I remember a particular pesticide, I can't remember which one it was, it was found at levels in the groundwater, in the drinking water in Eastern Oregon, in the potato growing areas that was above the level or near the level at which there were warnings that they were dangerous. We brought this to the attention of the state and what did they do. They changed some numbers in the formula to make it look like you could have more of that in the water and be okay. Well when I first came across risk assessment I thought I'm a scientist, this is a scientific way to approach things I'm going to look into this. But then I found, like I said it was a house of cards they move, they shuffle numbers around to justify.

MO: So here's a story I give at the start of the book and it's really the story of all risk assessments whether it is benzene in the workplace, smog, pesticides, how many trees you can cut in a watershed without the watershed falling apart, how many cattle you can run on an allotment without loosing all the species, whatever. Here's the story, imagine a woman is standing by an icy river she needs to get to the other side. There's one risk

assessor behind her he's cardiologist and he says well, she looks like she is young, the waters only cold, she'll be able to cross the river and not have a heart attack. Her chances of having a heart attack are one in a million. And there's a toxicologist, someone's who specializes in toxics and says well she ought to cross the river. It's only water, it's not toxic, there's no problem. And the third one is a EPA bureaucrat, who says well you know compared to the risk of working in a workplace with a lot of benzene or being a migrant worker in a field with pesticides this is nothing she ought to cross the river. Well she says I'm not crossing the river. And they say oh well, she's just a women, she doesn't really understand the numbers. And they come and show their numbers, they add them all up, and they say look your risk is in one of thirty million that you're going to die crossing the river, so you ought to cross the river. And she say's I'm not crossing the river. Exasperated they say why? And she points upstream and she says because there's a bridge.

MO: So that's really the story of the whole book which I think is really easy to read and it's a lot of stories and it gives a lot of reasons why when you are up against risk assessments you'll lose because it's asking the wrong questions. It's asking how much a pesticide is okay, rather than what's the least pesticide use we need to undertake. There's all kind of technical reasons the risk assessment is wrong and I go into some of those in the book too. But fundamentally it's asking the wrong question. It's kind of like asking how little do you have to feed your child and their not going to starve? Well anyone, any parent would say that's a stupid question. The question really should be what's the healthiest food I can give my child? Not how little do I have to feed them for them to survive. In a nutshell that's the story of that book. I think it's an easy read, and it's got lots of stories and it kind of is a good setting for environmental work you do cause it kind of gets you in that mindset that always be thinking of the alternatives, how could we do things better? And how can we get there strategically?

I: Can you describe, because you mentioned some of the alternatives to pesticide use. Can you tell me about some of them more in-depth?

MO: Yeah sure, you know of course I was used to the forest service saying they had to use herbicides when they were clear cutting the forest then they had to use herbicides when they killed everything else that would grow up. They had to use an herbicide that wouldn't kill the Doug Fir seedlings but would kill everything else so basically the Doug Fir seedlings no competition from anything and they could grow big again and could be cut down again for lumber. Alternatives to using the herbicides were one don't spray them because the first things that come back after you log is Red Alder which they used to spray with herbicide but it's a nitrogen fixer. It helps fertilize the ground. It helps

make the trees grow bigger and instead of planting little one-year-old Doug Fir seedlings, plant three-year-old Doug Fir seedlings that are kind of big and hefty and that they can take care of themselves. I mean some things that are simple as that and of course with farming, agriculture, so much has been learned about don't grow the same crop in the same piece of land, alter your crop so that one is fixing nitrogen, one of the legumes, one of the peas, another one is being able to use that nitrogen and maintaining good sights for predatory insects like Praying Mantis and so on that will help control the insects that would build up and eat the crop and of course for something like ants in the house you can handle them much more physically with some granular substances that basically there exoskeleton can't handle. It's not a chemical fix; it's just a physical abrasion.

MO: It's always looking for 'what are you doing to cause the problem in the first place? Can you stop doing that?' Then if there is an organism or situation that there quote "pest" what do they need that you can take away? Or where are there natural enemies that you could help bring in? Because often times as you know some of these quote "pests" are pests that are just from another place. There are exotic, and they don't have their natural predators with them and that's what biological control is about. So it's always, am I causing the problem myself? For instance by trying to grow crop every year, very little diversity among the crop on the same piece of land and of course pests are going to grow up. You're laying everything out for the pests. Same for something like cockroaches in the house. Are you leaving food around? Maybe if you put the food away, there's nothing to attract cockroaches or mice. Do you really have to use Decon or maybe you find where their holes are and put some steel wool in the hole and they can't come through anymore. If you take it as a fun investigation for why is this a problem? What did I do to cause the problem? How do I most naturally fix it so that problem isn't there anymore? And I know a fellow who worked much more in industrial toxics than in pesticides was saying he worked back east at Boston University. He was saying we can get by with 90% less of the toxics than we use in the US. Because you say to an engineer, I'd like to develop, I'd like to make this kind of product but I don't want to use any toxic chemicals. And the engineer will go and try to figure it out. That's what engineers do. It's a matter of saying, okay, we want "X" but we don't want to use toxic chemicals. So what are our options? And that's when it's fun and when it's good for the world. It's when you can just walk away from a toxic in the end.

I: Our main focus is women working against pesticide issues. Do you have an opinion on why you think this is more prevalent for women working in this issue than men?

MO: Right there in Eugene was a very famous risk assessment scientist actually, Paul Slovic. He looked at risks a lot. There was the general understand that women in general regard technologies like nuclear technology, pesticide technology, toxics technology, with more skepticism than men. So it's was just kind of assumed that it's just women vs. men. Well he sort of dug into this more by looking closely at men and women answers to questions about risk and found that it really wasn't so much women vs. men because most men were pretty skeptical about a lot of these technologies too. But the ones that were the most kind of invested in it and the wealthiest, the white men, white males who were running the industries and making money from stuff were outliers. Denying that these technologies were harmful and it was such an amazing series of studies that he did. African American men didn't think the technology didn't sound so good. Lower income men didn't think it sounded so good. It wasn't just a men and women thing, it was white males running the universe who thought. I think women are often not so invested professionally in causing these problems. Or using risky technologies. They are free'er to be more critical but don't discount that there is a lot of men too that think some of these technologies are pretty dumb ideas. If you're talking about children, women often but not always being more tuned in to exactly how protected of their children are that probably involves them often more in raising concerns about pesticides but gosh. John Jordan Cascade at Beyond Toxics is currently concerned about toxics. Its just there are a lot of people concerned.

I: Is there anything else you would like to add that you feel like you didn't cover?

MO: It's kind of a cliché, but someone my age is always thrilled when university students and young people are engaged. I know I'll be 70 this fall but this summer I have college interns living in my house and working out in the forest and BLM lands all summer and it's really exciting for me to be around young people who are going to be carrying on the effort to treat our world better. It's often hard to realize how far we have come, there was people who remember following the DDT spraying trucks and planes in the summer as they sprayed thinking it was just like water. That would never ever happen anymore. We've learned a lot but we are also getting to be a more crowded world, trying to grow more food on shrinking availability of land and meanwhile there are droughts and there's heat. And people can get pretty desperate and start throwing environmental cares under the bus. I think that's what we in the conservation world, advocacy world, environmental world exist for is to keep a positive vision and alternatives in front of people at all times, and keep hope alive.