Transcript for "Alicia Wasula, President of STM Weather."

Clear Skies Ahead: Conversations About Careers in Meteorology and Beyond

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Kelly Savoie:

Hello, Clear Skies Ahead listeners. This is Kelly Savoie and I'm hoping you can take a moment of your time to rate and review our show wherever you listen to podcasts. We have produced over 60 episodes and you can help us reach even more individuals that will benefit from the diverse experiences shared by our guests. Thanks so much for listening and I hope you enjoy this new episode.

Welcome to the American Meteorological Society's podcast series, Clear Skies Ahead, conversations about careers in meteorology and beyond. I'm Kelly Savoie and I'm here with Matt Moll and we'll be your hosts. We're excited to give you the opportunity to step into the shoes of an expert working in weather, water and climate sciences.

Matt Moll:

We're happy to introduce today's guest, Alicia Wasula, president of STM Weather. Welcome Alicia and thanks for joining us today.

Alicia Wasula:

Thank you for having me.

Kelly Savoie:

Alicia, could you tell us a little bit about what sparked your interest in science and how it influenced your educational path?

Alicia Wasula:

Sure. So I think like a lot of meteorologists, I was always interested in science when I was a child. I loved to read books about all kinds of science, I was a real bookworm. I originally was thinking when I got a little bit older that I might like to go into astronomy, but then when I started looking at colleges and careers, I realized that there's only a handful of those that are professional astronomers in the United States. I think it was in the '60s at that time.

So I broadened my scope and then I actually began thinking that maybe I always liked looking into sleuthing or detective work. And so I thought that I wanted to do forensic science and that ended up actually being something that I didn't realize there was quite so much in the way of chemistry involved. So that was another career path that I decided against. And then I'd always been interested in the weather and I really enjoyed reading books about that too, but I didn't realize it was actually a viable career path until I started looking at colleges. So I'm probably one of the few meteorologists who came into this career not knowing from early childhood that this is what I wanted to do.

Kelly Savoie:

And so where did you end up going to school? Did you get a degree in meteorology?

Alicia Wasula:

Yes. So I am local to upstate New York and I went as part of my college research to look at the University at Albany right here nearby me. And I realized what a great program they have. I actually hadn't even known that, like I said, at the time I was looking at colleges, it wasn't really strongly on my radar as something that I considered as a major. But once I found it and I toured the department, I was really impressed with what I saw and very interested. And so that's how I ended up going to school there. I actually stayed for graduate school as well and got my master's and PhD at the University at Albany as well.

Kelly Savoie:

And so did you know that forensic meteorology was a thing at the time?

Alicia Wasula:

So that's another really good question. No would be the answer. When I was an undergraduate, I had the opportunity to do, it was like a short fuse internship, so probably during a semester break or something like that for a few weeks with a local forensic meteorologist. And that was my first introduction to this area of meteorology as something that people do as a career. And so I found it really interesting, but actually at the time I did the internship, I really never thought about that as something that I was going to end up doing as a career either.

Matt Moll:

So what opportunities did you pursue inside and outside of school that you knew would be beneficial to securing a job in your profession?

Alicia Wasula:

So I think for me, honestly, the teaching experience that I had in school and the opportunities to do undergraduate research gave me really good skills that I didn't necessarily know at the time would become so important in my career now in forensic meteorology. That whole idea of public speaking and explaining science concepts to people who maybe don't understand them just yet because they're students, they're not meteorologists was something that I, like I said, didn't know I would need at the time, but it's become super important in what I do today.

Kelly Savoie:

So what was your first job in the field and how did you end up where you are today?

Alicia Wasula:

Also, this is a really interesting question. I have followed what some might consider a very non-traditional career path in the field of meteorology. So when I finished my graduate school career and got my PhD, I had a six-month-old baby and my husband worked for the National Weather Service Office here in Albany, New York. And we knew that we wanted to remain local, this is where both of our families are. And so back in the day before Zoom was a real thing, it really wasn't an option for me to travel far and wide for a job.

So what I ended up doing while my kids were young was teaching anywhere and everywhere I could. I did a lot of teaching on an adjunct basis at various local schools in the area. I went back to the department at the University at Albany, taught some upper level classes there and I taught at a local community college. I developed a couple of classes there myself during my time. And so that's where I

started. I really liked teaching at the community college because the demographics there of the students that I saw were really different compared to maybe a more traditional school.

Matt Moll:

Could you walk us through a typical day on the job as president of STM Weather?

Alicia Wasula:

Sure. So my usual answer to this question, which I get a lot, is that there is absolutely no typical day in my life. So part of this is that I own a small business and I can tell you a little bit about how I came to be in ownership of this business. I went from teaching, as my kids got a little bit older, I was looking for other types of work and there was a local meteorologist whom I had met at my undergraduate internship at the Albany Weather Service Office. And he had retired and he had started this company and was looking for some help. He did it as a retirement business after his federal career and was getting a little bit busier than I think he probably wanted to be at the time. And so it worked out great and I really benefited from having him as a mentor for three-ish years before he decided that he really wanted to retire for real from the private sector this time and sold me the business at that point.

So today, now I'm in ownership of a small business and that relates to your question about a typical day and I said there is none. On any given day I can be doing administrative work. I have some contract help to do things like bookkeeping and whatnot, but I still have to run payroll, I have one employee, workload delegation, scheduling, all those kinds of things as a business owner, you have to do by yourself. I might be doing casework where I'm actually working on case research or writing a report, maybe doing trial testimony if that's required for a particular case. I could be doing volunteer work, so something similar to what we're doing here today or maybe doing a school outreach talk.

That's something that I really feel strongly is important for us as meteorologists just to be involved in our local communities. And for me, I really enjoy going to schools and talking to kids about science. Part of our profile online is that we do have social media as the business and so scheduling those posts and creating content, writing blogs would be another task that I might be doing. And then finally, I guess you could consider business development, developing new products or services, thinking about hiring down the road, looking long-term into the business is another portion of time, which I don't get to spend nearly as often as I would like, but it's also an important part of running a successful business.

Kelly Savoie:

So do you feel the teaching experience you had helped in forensic meteorology, for instance, when you do expert testimony, do you think that was really helpful to be able to speak in front of large groups?

Alicia Wasula:

Yeah, absolutely. And I think the key is the type of communication that it is. So in my work, we are usually retained by attorneys and there's a whole spectrum of how well they understand science. And so even just working directly with attorneys before a case even goes to trial, I'm still explaining what I did for my research and how I came to conclusions about what happened with the weather in a particular case to a non-scientist. And so you not only have to be able to explain what you did and that your work is scientifically sound, but you also have to be able to explain it in a way that somebody who doesn't know any science could understand easily and in very quick bullet points because attorneys tend to be very busy people, so you have to really be able to convince it as well. So yes, absolutely the teaching helped me.

Kelly Savoie:

So you mentioned that you have to explain this sometimes difficult information to attorneys or even just property owners, so forth. What do you find as the biggest challenge with that? What have you learned that you really need to do? You mentioned something about the bullet points, but is there anything else that you've found is beneficial to reaching those people?

Alicia Wasula:

Right. That's another really good question. So attorneys, I have learned communicate in very different ways than we do as scientists. And so when I was in grad school and maybe writing a paper, I would always work on my figures, the images came first. And so you tell your story through a series of images and then you draft the text around that. But attorneys are word people and so they prefer not to have to take the time to understand graphics unless it's really essential to a particular report. So I had to really learn, during those first three years with my former boss, how to shift my writing style to something that an attorney could understand. And the same thing is true I think with oral communication too, you have to think about your audience and maybe where they're coming from or what level they're at in terms of their understanding and craft how you communicate your research to that specific audience. So that was definitely something I had to learn when I first got into this, even coming from a teaching background.

Kelly Savoie:

I guess it was definitely helpful to have a mentor there.

Alicia Wasula:

For sure. And that's something I cannot stress enough is the importance of having a mentor. And now having been in this for several years, myself, serving as a mentor to people who are coming up as newer business owners behind me by a few years. It's been something that's absolutely invaluable to my development as a business owner and as a scientist. And so that's something I always tell students about as well.

Kelly Savoie:

So it sounds like you have lots of varied things going on. Do you have anything in particular that you like the most about your job?

Alicia Wasula:

Well, it's funny because I never really thought that I would say this, but I have to say that the variety of the work that I do is actually something that I've learned to find really gratifying. I always thought that I was the kind of person who just would like to do the same thing and be very predictable day in and day out. But we see all kinds of cases walk in the door and you just never know. So I'm in the northeast United States, we deal with a lot of slip and fall accidents or motor vehicle accidents on snow and ice. But we see all different kinds of weather cases and some really interesting overlaps between meteorology and the law. And so I think the variety of the work is one of the things that I really enjoy the most about what I do.

Matt Moll:

And so what are some of the biggest challenges that you face in the field?

Alicia Wasula:

So I would say that these generally relate to the business ownership side of things and less so to the meteorology and the research there. One of the issues is that it's me and I have one employee, like I mentioned, and so there's two of us to handle the workload, which is entirely unpredictable. There's a little bit of seasonality to it related to when attorneys tend to take their vacations during the year, so sometimes it'll get a little bit slower in the summer and sometimes around the holidays it'll slow down. But I'm just coming off of a holiday season where it was just an absolute flurry of activity those last couple of weeks of 2022. And so not having a good handle on how to anticipate work and knowing that there's only a couple of us to handle it, it's a little bit unnerving at times. And it doesn't help a planner like myself to really anticipate what's coming up down the pipe.

Another concern, I guess, or challenge that I have faced is just dealing with clients. Sometimes clients don't want to pay and you have to go after them and chasing down if you need a document from a client and they're not getting back to you. Dealing with these people skills from the perspective of business owner to client is different and it's difficult. And so that's another challenge. And then I think the last one is probably related to the actual work with attorneys and you're giving them an opinion about the meteorology for a particular case, but they are hoping to use that opinion to support their case and have a good outcome for their client. And so there's certain attorneys who will just want to push your words a little bit outside of the scope of what your opinion really is.

Yeah. So you have to be really clear about setting your boundaries about what you're comfortable saying. Sometimes word changes really don't mean anything for meteorologists, but legally there's certain implications. And usually those are fine and indifferent to the opinion. But when they start asking you about your opinion and can you explain it this way or that way, you have to really be firm because the last thing you want to do is weaken your opinion by saying something that's outside of the scope of the science or outside of your wheelhouse as an expert.

Kelly Savoie:

So you said that attorneys mostly like to see written things, but when you do expert testimony, if there's a jury, do you find that using visuals or graphs at that point is helpful? Or do you just do what the attorney tells you to do?

Alicia Wasula:

So sometimes, now, I will preface this by saying that most of what I do settles out of court. So a very small percentage of cases actually end up going to trial. And so usually before a trial, you'll have a pre-trial meeting with your attorney who sets up what your direct examination may look like. And at that point you can talk about what graphics you feel may be helpful because explaining to a jury how you came to your opinion is essentially teaching. And so at that point, sometimes it becomes really helpful to have a graphic, but usually one or maybe two I've used, I think at the most. It really has to be concise and easy to explain and easy to blow up on a screen where people can look at it and easily get the idea of what you're trying to convey. So it has to be with a lot of intention and purpose and help your direct exam go a little bit smoother, otherwise it doesn't make sense.

Matt Moll:

And you're providing testimony in civil and criminal litigation, is that correct?

Alicia Wasula:

It's mostly civil.

Matt Moll:

Mostly civil?

Alicia Wasula:

Yeah, I've only had one or two criminal cases and they did not involve criminal testimony.

Matt Moll:

So what are some qualities and attributes that you feel would successful business owners in the field of forensic meteorology need to have?

Alicia Wasula:

Okay, so first and foremost is good science. So you need to be able to do a really good case study analysis and that involves knowledge of observational data sets. You need to understand where your data that you're going to base your opinion on comes from. How is the site cited? How is it maintained? Is the data quality controlled? Because all of these things, if you don't know them, they can undermine your opinion if a case does end up going to court or even in a report. So good science and also excellent communication.

I mean, we've talked here today already about written and oral communication and both of those are super important. So I think those are probably the two biggest skills. And then on the business ownership side, you have to be self-motivated and organized, especially if you have an employee or more employees and you're trying to delegate workload and things like that. And you have to be able to learn new things. I mean, sometimes you have a business problem that you don't know how to answer or solve and you have to do your homework and read some books and maybe learn some new software. And I've done all of that over the years that I've been a business owner. So you have to be able to keep learning even years down the road from when you first start doing this.

Kelly Savoie:

So for our student listeners out there and early career professionals who may be looking to establish a career in your field, do you have any advice? Is there anything you wished you had done or glad you had done? Or are there any professional certifications that have been helpful for you?

Alicia Wasula:

So yeah, there's a couple of things. First thing that I always tell students is to seek out opportunities, even if it's related to something that you may not think you want to do as a career. Just learn from people, make connections to people, those one-on-one connections. For example, with the forensic science meteorologist in the area that I did and my connection, who was my former boss, I didn't know at the time, but I met him doing an internship as an undergraduate at the National Weather Service. So I knew pretty quickly I didn't want to go into the National Weather Service, at the start of that internship, I figured that out very early on. But those connections that I made came back years later and I never would've known it at the time. So the more people you can learn from and the more experiences you can have, those are great.

So just look for internships, practice communication, and all types, but oral and written communication specifically to non-scientists. And it's pretty easy to find volunteer opportunities because everybody wants to know about the weather. So you can talk to school groups, you can talk in your community. Answering questions on the fly like that when you get those groups is a really good way to learn how to communicate science to non-scientists. And then finally, I would say that the AMS certification, the Certified Consulting Meteorologist certification is helpful if you do go into forensic meteorology and testify at court. Any credentials that you have that help to describe your expertise as a meteorologist can help you be accepted as an expert by a judge. And so the CCM credential is really important. And specifically because it talks about your ethics, one of the three components of that certification is ethics. And so by obtaining that certification, it attests to the fact that you're very ethical in your behaviors and what you do and how you communicate.

Matt Moll:

Well, we're so grateful for everything you've told us about your career. However, before you go, we always ask our guests one last fun question at the end of our show. So what is your favorite food and why?

Alicia Wasula:

That's easy. That's the easiest question you've asked for me. So my favorite food is spaghetti and meatballs because it was my favorite food growing up as a kid and my mom always made it as a comfort food. And so that's what I eat today when I need that comfort food too.

Kelly Savoie:

It is such a comfort food. That is one of my favorites as well. It's nothing fancy, but whenever my son, I'm like, "What should we have? Should we just have spaghetti and meatballs?" And his eyes light up and he is like, "Oh, yeah." And with the garlic bread and all that.

Alicia Wasula:

Absolutely.

Kelly Savoie:

Absolute best. Do you make your own sauce? Because I do not. But do you?

Alicia Wasula:

I do when I have time, but it's always better when mom makes it for me, even at the age that I'm at now.

Kelly Savoie:

And the meatballs too, I never seem to be able to make them as good as my mom's meatballs. I don't know what it is. I always try to follow the recipe, but it just never tastes quite as good.

Alicia Wasula:

That's because it's mom.

Kelly Savoie:

Right. Well, thanks so much for joining us, Alicia, and sharing your work experiences with us.

Alicia Wasula:

You're welcome. I hope this answered a bunch of questions for some students and early careers out there.

Matt Moll:

Well, that's our show for today. Please join us next time, rain or shine. Clear Skies Ahead, conversations about careers in meteorology and beyond is a podcast by the American Meteorological Society. Our show is edited by Peter Trebkey. Technical direction is provided by Peter Kile. Our theme music is composed and performed by Steve Savoie. And the show is hosted by Matt Moll and Kelly Savoie. You can learn more about the show online at www.ametsoc.org/clearskies. And you can contact us at Skypodcast@ametsoc.org if you have any feedback or would like to become a future guest.