Transcript of "Brett Edwards, Meteorologist at AccuWeather in State College, Pennsylvania"

Clear Skies Ahead: Conversations about Careers in Meteorology and Beyond

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Kelly Savoie:

Welcome to the American Meteorological Societies Podcast Series on Careers in the Atmospheric and Related Sciences. I'm Kelly Savoie and I'm here with Rex Horner and we will be your hosts. Our podcast series will give you the opportunity to step into the shoes of an expert working in weather, water, and climate sciences.

Rex Horner:

We're excited to introduce today's guest Brett Edwards, a Meteorologist at AccuWeather in State College, Pennsylvania. Welcome, Brett. Thanks so much for joining us.

Brett Edwards:

Yeah, guys. Thank you for having me.

Kelly:

Brett, tell us a little bit about when you became interested in meteorology and how it influenced your educational path.

Brett:

Well, I think that's a really interesting thing about meteorologists. I feel everyone has that story or it's always just been there. For me, it actually goes back probably I'm 8, 10. I'm a fairly young age and I'm watching TV with my mom and we're just flipping through channels, trying to find something to watch. And I noticed something on the TV, and I'm like, "Wait, go back a channel." And it was the Weather Channel, actually. And Storm Stories was on and they showed a beautiful stove pipe tornado. And I just remember that exact moment was like, "That's it." And from then on, the rest is history. From there, I pursued my Bachelor's Degree in Meteorology at Valparaiso University. And now I'm living the dream, a Meteorologist at AccuWeather.

Rex:

What were you doing in college beyond the main curriculum? Did you pursue any other opportunities that helped you find the job at AccuWeather or put something on your resume that might've appealed to them?

Brett:

A couple of things. Yeah. I think the biggest thing is to just be as involved as possible as you can outside of the regular coursework, if you can be a member of your local AMS chapter, I did that.

I was also a member of our school's storm chasing team, where we would actually go out and do some field work, try and find these storms. Because that's where you really take everything you've learned in class and apply it in the field. That nowcasting right then and there is always important to get that real life training. Especially for juniors and seniors, going to AMS, networking as much as you can, because that is how I got this job. It actually goes back to my junior year. I went to AMS and I networked with a gentleman named Tyler Duvall. He is one of the senior meteorologists at AccuWeather's Wichita office.

Brett:

I talked to him for a little bit and I actually applied for their internship that day. I got the internship, the summer came and went and the other intern and I—our internship is winding down—and we just ask him, "Why'd you choose us?" At the end of the day, he said there were a ton of very qualified applicants. "I went with the two people who actually networked with me at AMS." And that's how I got the internship, networking, networking, networking. I cannot stress that enough. And then from there, I finished my senior year, still involved in all those clubs and activities at school. And then the opportunity at AccuWeather in State College popped up and I was fortunate enough to get the job. So, certainly it all stems from networking and being able to get that internship.

Kelly:

Yeah. It's so important. You have to get out there and meet people and even just with internships, it's not a salaried position, but you're still meeting people in the field and they can write a reference for you. So, yeah, it's definitely key.

Brett:

No, definitely key. And yeah, as you said, I was fortunate enough, this internship was paid. So that certainly helped because I'm from the Chicago area originally and moving down to Wichita, Kansas, is just a hop, skip, and a jump from home. So, certainly what they were able to pay me was very beneficial. And then, yeah, absolutely, as you said, they can be references down the road. They can help you. I'm sure the State cCllege office called Wichita and asked, "How was he as an intern?" And I'm sure that played a very large factor in me getting the position I'm in now.

Kelly:

Absolutely. Now that you're working in the field, is there anything you wish you had done differently along the way, maybe a certain class that you thought might be really helpful or anything else?

Brett:

Coding. You got to know how to code in this field. My current position, the coding is not very heavy, but that's where the industry is heading. If you can even have the basic understanding of Python that is going to set you apart from a lot of people and that's really going to help you when you're pursuing jobs. I know for me, it certainly helped me a lot. If I had to go back and say one class I wish I took, ironically, I actually wish I took a couple business or accounting classes. Because right now I took just strictly meteorology and I'm actually looking to try and someday

get down the road into where I can take my meteorological knowledge and apply it to the insurance industry. But they're looking for business. They're looking for people who know data, data analytics, all that stuff. So those are certainly some classes I wish I took during my time in college.

Brett:

I didn't know I wanted to get into that field until it was too late. So it's, "Well, I did what I thought was right at the time."

Rex:

Yeah. Coding has been pretty popular of a response. We've heard that from other folks as well, that's the new skill to master. That's becoming part of the toolbox. When did it hit you, that that was so necessary?

Brett:

Ironically, it hasn't hit me too hard here in my current position. But as I look out, as I started a job search, just seeing what else is available out there, every single job I've seen, Python, MATLAB or some data, if you are proficient in R, you got to know some sort of data or coding skillset. Every single job I've seen posted has had that. And it's just, "Oh, this is really where the field is going."

Rex:

And was there any talk of that when you were in school? Were your classmates saying, "Oh, I've got to get my coding somewhere outside of my classwork so I can be prepared for applying for jobs?"

Brett:

Oh yeah, absolutely. And we were very fortunate. One of the professors at Valparaiso University, Kevin Goebbert, is big into Python and he started up a Python and Fortran—yes, we learned how to code in Fortran, an ancient language—but we learned how to code Python and Fortran, and then talking to the professors here over the past few years, they've continued to push that into more of the curriculum in different classes. We have a climatology class, where originally we did a lot of our map production through GEMPACK. That has now been pushed into Python as well. So we're seeing the entire program itself shift more into Python. So luckily our program has continued to realize this is where everything is going. We need to make sure our students are prepared. And I think they've done an excellent job pushing Python into as many courses as possible.

Rex:

Interesting.

Kelly:

That's great to hear.

Rex:

So what level of education is required for being a meteorologist at AccuWeather?

Brett:

It's really just a Bachelor's in Meteorology. Fortunately, if you want to go beyond forecasting, if you want to look into research, that's where obviously a Master's Degree or PhD starts coming to play. But at AccuWeather, baseline education is a Bachelor of Science in Meteorology. And that's where I've seen a few other forecasting companies. I have friends at DTN up in Minnesota and Oklahoma, same thing, Bachelor's Degree in Meteorology. It'll get your foundation going and you can build from there.

Brett:

I know there are some people who have gone straight from their Bachelor's to their Masters. I went the workforce and went straight to work and we're building different skill sets, but we're both still using these opportunities, either in school or at work to, as my professor said, build that tool belt that we have, that meteorological tool belt, whether that's tropical forecasting, whether that's coding, severe forecasting, mountain meteorology. Whether it's school or work, just being able to continue to hone your skillset.

Kelly:

So Brad, could you give our listeners an idea of what a typical day on the job is like for you at AccuWeather?

Brett:

I think that's one of the really great things about AccuWeather, as is in meteorology, is no one day is the same as the other, but I think at AccuWeather it holds even more truth because we have so many different schedules that requires such a different variety of skillsets. I guess one of the schedules that I work primarily is what we call XPOD. And that is our client warning and consultation service. And it's definitely more so a winter schedule than a summer schedule. During the summer it's one person doing the schedule, during winter it's four, but a lot of it is you come in, you get in touch, you try and look at what's the weather doing today. What's it going to look? This is much more mid to short term warnings and alerts about 24, 48, 72 hours out.

Brett:

We'll look at those and then if I come in at 10:00 PM, I'll send out a few client products that may go out 7 to 10 days. I know one of our clients that we worked with quite frequently was the city of Chicago, where we would send a forecast—a more detailed forecast that went out 7 days. And then another section of the forecast went out 8 to 14 days, not as detailed, but multiple clients have similar forms, similar types of products that they're looking to receive. So we complete those products, send them out. And then once we get later in the morning, 2, 3 in the morning, we get those 0Z runs in, we'll actually start going into our portal and we'll start issuing warnings, issuing alerts for all of our clients across the entire country.

Brett:

We have clients from coast to coast and in a handful of countries across the world, as well. So it's certainly, you don't become a master in one area, but you learn just how to forecast and warn in a variety of different areas. And then on top of that, as you're issuing warnings, you'll get calls throughout the shift. I know we'll have a handful of clients call that are up in Minnesota, in upstate New York, they'll call and if they receive our warning, they may want some more detailed information. So I'll take that phone call and explain to them, "Well, here's what we're thinking."

Brett:

I can go beyond that warning I sent them, giving them that little extra detail that they're looking for. And that schedule is certainly a little bit of "feast or famine" for lack of a better term. If the weather's quiet, the schedule's quiet, but if you're busy, an 8 hour shift just became a 10 hour shift because you're that busy. So it's, as the weather goes, we go. I think that's the way a lot of it works in meteorology, but certainly on that schedule in particular. I work that schedule the most and that certainly how my day typically goes, but certainly AccuWeather has offered me a lot of opportunities to learn beyond my comfort zone, which has been really helpful, as well.

Kelly:

So are you assigned clients or is it just anyone working that shift would just take a call from any client?

Brett:

Yeah, for the most part, it is any client. Just whoever's working that day, you are the one taking our phone calls, you're the one issuing our warnings. Now, for more high level clients, if a state DOT calls, a more senior meteorologist or someone who is more trusted, more experienced in that schedule, such as myself would typically take that phone call. So most of the time it's whoever's working the schedule can take the client phone calls, can issue the warnings. It's for those handful of clients, that's where we typically ask a more experienced forecaster to step in.

Rex:

So, Brett, what do you like most about your job?

Brett:

For me, it's hands down talking to the client. I am someone who really enjoys communicating with people. I think that's one of my stronger points and I really enjoy getting that. Whether it's giving a consultation over Zoom or you're just talking to them over the phone or Skype or whatever, I just really enjoy communicating with that client because it's so much easier. They can ask questions, I think, in better detail over the phone than they can over an email because when they're talking, they'll realize, "Oh, that's not actually what I mean, this is what I'm looking for." We can go back and forth much more effectively and that's, I just think a better way to communicate and something I really enjoy. Just again, talking to people, being interactive with the clients. That's very much what I enjoy the most.

Kelly:

So on the other side, what's the most challenging thing about your work?

Brett:

Challenging? At that point, I think at the end of the day, you've got to be able to take those stressful moments and you got to bottle them up, put them to the side and just keep plugging along because that's going to happen. In any forecasting job, you're going to get that one event, your perfect storm depending on what your client base is or on what your specific duties are that day where you are just slammed and whether you like what you're doing at the moment or not, you're going to be stressed. And that's just the way the field works unfortunately. As the weather goes, we go. When the weather is busy, we are very busy.

Brett:

So I think it's really important to be able to just keep plugging along no matter what the circumstances are and just keep going. And there's going to be people that disagree with you. I know at AccuWeather, very collaborative forecasting going on. This is not one person making a forecast. This is the entire department coming together to make the best forecast possible. You're going to disagree with people. It's going to happen a lot. And I think it's a very important skill set that a lot of younger forecasters are going to want to learn as they get into the field, is being able to work with people who just look at a forecast a different way from you and how you two can collaborate on that forecast and come to a consensus that maybe you don't a hundred percent agree with, but you found that common middle ground.

Brett:

I think that's really important. Just that collaboration. It's such a collaborative science. It's a very close knit field too. Meteorology is small, and it seems that everyone knows everyone. So it's really important to be able to work together in a group as much as possible.

Rex:

What's the work life balance in your job? Is it good? Is it difficult? Do you have any strategies that make it successful for you?

Brett:

I think again, that goes to when the weather's busy, you're busy. So maybe the work/life balance isn't quite what you would hope it would be. But I think for the most part, I'm able to maintain a relatively good work/life balance. And it varies person to person. I think the biggest thing for me, is make sure you're doing what you actually enjoy doing outside of work. I know for me, that's singing in a choir, being in musicals, playing sports, whether that's golf or ultimate Frisbee or whatever, just make sure you're getting out and doing the stuff that you think makes you your own unique person.

Brett:

What did you enjoy doing in college? See if you can pursue that in whatever area you may be living in with your current position and really just making sure that you're not... I hear it all the time. People say, "I'm looking at the weather 24/7. I'm always tuned in." I'm like, "That's great. Make sure you're not burning yourself out too quickly," because that's very easy for that to happen. I know for me, that nearly happened with hurricane Florence. I was in the stretch of a, I want to say it was an 8 day work week, and I was staying late every day because I think it was

my first or second year at AccuWeather. I still felt I had to prove myself. And I'm sitting there helping someone, getting them familiar with this software we're doing. And one of the forecasters, I'll never forget this.

Brett:

He just comes to me. This was my third 12 hour day in a row. He says, :Brett, are you off tonight?" "No." "Are you off the next day?" "No." "Are you off this weekend?" "No." "Go home." He just said straight there, "go home," because he could see it in my eyes. He knew I was gassed. And I think it is so important that yes, whether is what we're passionate about for obvious reasons, don't let it consume you. Find activities outside of work. Because if you don't, it's very tough to stay in this field for very long, because forecasting is going to wear on you. It's tiring, it's exhausting. And it's going to challenge you.

Brett:

So, really that's biggest thing is just find that stuff outside of work that you enjoy doing and sleep. I am one person that I am willing to sacrifice sleep if it means hanging with people. So I have been known to sleep two hours a night.

Kelly:

Oh my goodness.

Brett:

It's not ideal. Trust me. I've gotten better at it since then, but certainly making sure you get adequate sleep where you, yourself can function. You feel well rested. And then again, just finding those activities outside of work that you enjoy doing, because that's going to give you a better sense of that work/life balance, is just knowing when you can unplug and relax.

Kelly:

So do you have the same shift every day, but you just have to do overtime or do you switch hours?

Brett:

We do switch hours. I know for my first year I was pretty strictly 10:00 PM to 6:00 AM. As I've gotten into my second and now almost my third full year at AccuWeather, it's become a little bit more of I'll still work a lot of 10:00 PM to 6:00 AM, but then there's some 1:00 AM to 9:00 AM, 2:00 AM to 10:00 AM, 3:00 AM to 11:00 AM. And yes, there are days where I will work. 2:00 AM to 10:00 AM, go to bed and be back in the office at 10:00 PM. Those happen. I don't think it's unique to AccuWeather, it's part of the field we're in. Unfortunately the weather doesn't stop at 5:00 PM on Friday, so unfortunately we don't stop either. So it's an unfortunate part of the field, but again, I think that's something most forecasters understand when they're getting into the field. It's the weather doesn't stop, so we don't stop.

Kelly:

Do you have a most exciting moment that's happened to you during your career? Either at AccuWeather or previous to that?

Brett:

I think I've got a couple and all of them just come from forecasting wins. And not even, "Okay, maybe here's what I thought—it didn't get into the actual forecast, but I knew that was my thinking." One of those was actually Hurricane Michael, when it first formed east of the Yucatan Peninsula, was going to go straight north. There's plenty of sheer, but I'm looking at 88, 89 degree Gulf water. And I'm like, "We could have a major hurricane making landfall. This could be a 4 or 5," and everyone laughed at me. Who's laughing now? So I think just having those small wins here and there where you're like, I nailed that five days out.

Brett:

I know another one. I was forecasting in Europe and I predicted tornadoes in the Netherlands and all the other European agencies were not forecasting that. There were four tornadoes within the Netherlands, those few small countries right there. So it's getting those small wins where you just absolutely nail the forecast. It's one of the best feelings on Earth. Obviously, I wish my forecasting wins came with, "Oh, I predicted 72 degrees and that was right," because we obviously don't want a category 5 landfall. We don't want tornadoes in populated areas, but unfortunately we have to disconnect from that a little bit as meteorologists, but certainly those forecasting wins are really exciting and it gives you that boost of confidence, like, "I know what I'm doing here." And it's a good feeling.

Rex:

So Brett, you are member of the AMS Financial Weather Climate Risk Management Committee. Could you tell us a little bit about your role on the committee and what sort of duties you perform?

Brett:

Well, it is actually a relatively new committee I'm a part of. I'm still just a member and I'm still just talking with people. I know one of my old coworkers, Max Vido, informed me of this committee. And as me wanting to get my feet into the insurance industry a little bit, using my meteorological knowledge, this seemed like a very good place where I could hear from some professionals in the field right now. So a lot of it has been joining the meetings and just hearing what they're talking about. I know we have one project we're working on, Bridge the Gap, and that is, we're just trying to explain, "Here's the coursework. Here's what you should really be looking at when you're building your courses first semester. If you want to get into this field, here are classes that can help you separate yourself from other candidates when you're applying for jobs in this industry."

Brett:

I know that was one of my things that I wish I knew early on. Because my senior year came and went and this was a field I was getting interested in, but I didn't have certain courses that would have helped me better my opportunities of landing a job in that field. So I know that's one area that I am passionate about, is being able to explain to students and even professors, if this is an

students are interested in, here's where you should push them towards in terms of coursework, in terms of any research they may want to do, this is where you should have them focus their energy. That'll serve them the best down the road when it comes to attempting to land a job and whatnot.

Kelly:

Yeah, that's really valuable information. And AMS did recently take the report that was compiled by your committee and the private sector board. And we did add a section to our career resources site, which was preparing students for positions in the private sector. It's great information. So, thanks to your committee and the private sector board for putting that together.

Brett:

Yeah. There were definitely a lot of people who put a lot of hard work into that. I joined the committee towards the tail end, so I had no part in that, but there were a lot of people who put in a lot of hard work into that and it was a really good report. I was really excited about it.

Kelly:

Brett, we always ask our guests one last fun question at the end of each podcast. What is your favorite musical group?

Brett:

Yes. Well, I'm going to name one that you probably have never heard of. I am a big fan of Pentatonix. It is an a capella group, actually.

Rex:

I have heard of them, actually.

Brett:

Someone else has heard of them. Rex, I knew you were cool.

Rex:

Do you have a favorite cover they do? Tell us a little bit more about them, how you found out about them.

Brett:

I just found out by sheer luck, actually. I've been singing in choirs most of my life and recently doing musicals, but I joined some a capella groups my freshman and sophomore year of college. And one of them said, "Hey, we're going to sing this cover by Pentatonix. So, here's the YouTube link, listen to them, and we can start to nail down some parts." I was a bass at the time. So I'm listening to Avi sing. And I think it was "Say Something" and I'm like, "Bass voice. Oh my goodness."

Brett:

And then I fell down the rabbit hole as they had 20 other songs under their YouTube channel. So natural, I listened to all 20 in one sitting, but that's how I got into their music and I've been a big fan of their music ever since.

Kelly:

I'll be sure to check them out.

Rex:

I love a capella personally. So, that's a great interest.

Brett:

No, I'm a big fan.

Rex:

Well, thank you so much for joining us Brett and for sharing your work experiences with us.

Brett:

Thank you guys for having me. I'm hoping whoever's listening can take even just one nugget of information I gave them and it helps them down the road. So I hope this was able to help.

Rex:

That's our goal too.

Rex:

Well, that's our show for today. Please join us next time, rain or shine.