Hello, and welcome to the Small Farms Podcast, a production of the Small Farms Program at Iowa State University Extension and Outreach. Our podcast covers the opportunities and challenges associated with rural life. In this episode, I visit with Meaghan Anderson, Central Iowa Field Agronomist for Iowa State University Extension and Outreach, to talk about the damage due to the recent derecho that occurred on August 10 2020! I'm Christa Hartsook, Small Farms Program Coordinator and we hope you enjoy the show. Megan, welcome. Thanks for being on.

Thanks for having me, Christa.

So we're not talking about a great topic today. And I thought first we should probably explain what a derecho is for listeners that are not familiar with what occurred here.

Yeah, so well, this is good, because I'm not a meteorologist, right? I'm a climatologist so we can have a little conversation about what I know. So my understanding is, is that the
kind of the definition of it is that it’s essentially high winds, often straight line winds that
go over a long distance, and it has to be a certain width, right? So though the one that
came across Iowa, I think Justin Glisan, the state climatologist said that it was 770 miles
long from start to finish. And it lasted for 14 hours before it finally fizzled out in western
Ohio. So basically, it was like moving at the speed of a car on the highway 55 miles an
hour across the Corn Belt on the 10th. It was just hugely wide. The span of damage is
incredible across the state, but you know, I think a lot of us got a new vocabulary word on
the tenth when we found out about this. So now we all know what this is. And we hope, I
mean, I think everybody is in agreement that we hope we never ever see one again.

Christa Hartsook 02:08
Never ever. Megan, you talked a little bit about the length of that storm damage and how
far that went. Are there any kind of estimates in terms of how wide of an area that
impacted across Central Iowa?

Meaghan Anderson 02:21
Yeah, I mean, there are a number of pretty good estimates, I think the Iowa Department of
Agriculture and Land Stewardship (IDALS) worked really closely with the USDA to come
out with some estimates as far as the acreage that was affected and the size of area. And
I think if I remember, right, the number that they came up with was 36 counties that were
most severely affected. And their estimate was 3.57 million acres of corn, and about two
and a half million acres of soybeans. And that’s just in the most effected area, right, that’s
nowhere near this 770 mile length of it. That’s not even the whole span that it was across
the state of Iowa, but really, from maybe 10 miles 15 or 20 miles north of highway 30, all
the way down to I-80. There is I would say widespread damage, basically starting and
kind of West Central Iowa, it just barely got started, it seemed like up near Carroll. And
then it just got wider and more dramatic as it moved into the central part of the state. And
it was pretty sustained across that whole east central part.

Christa Hartsook 03:26
Megan, when we’re talking about damage, then to some of our agricultural crops, explain
a little bit to our listeners, what you are seeing out there, what does the corn look like?

Meaghan Anderson 03:36
Yeah, so there’s a lot of variety in the types of damage that we’re seeing out of this. And
you know, anybody notices it when you maybe go down the highway or go down a gravel
road, and you look out in the field. So probably the most dramatic and really obvious damage that we see right now is corn that was completely broken off its stock below the ear. And so we’re noticing that now obviously, because the corn is dead, right, we’re seeing a lot of browning going on in these fields, because it was essentially completely cut off from water and nutrients, right, and it’s just drying down. It’s broken down in that field. And there are some pretty good pockets of corn that’s like that. And every once in a while you’ll find a whole field that looks like that. And then probably the next damage that’s really easy to identify is maybe just some leaning. I know I’ve heard it referred to as a willowing where basically the stock of the plant is leaned over but the roots are still totally intact in the ground. And so that’s a really minor effect, right? We don’t expect that to cause much issue late in the season, it should be relatively easy to harvest but then we have this whole mixed bag in between that right where we have we call it root lodging where essentially the root ball of the plant is in some cases pulled out of the ground partially and the plant leans over from those roots or from the base of the stock. In some cases they completely break off, we’re seeing pitched stocks, we’re seeing ones that were cut off above the ear, and just this whole variety of symptoms all happening, you know, within 10 feet of each other. So every once in a while, we’ll see the field that’s completely flat all the way across, it was totally route lodged or broken off underneath the ear. But for the most part, we’ve got this just crazy mixed bag of symptoms all over fields.

Christa Hartsook  05:27
Yeah. So Meaghan, million dollar question, then as producers are looking at these fields, and looking at this wide range of damage anywhere from total loss to you know, personal, maybe some leaning, who what are their options? What are they looking at?

Meaghan Anderson  05:44
Yeah, so for basically, every producer, their options are going to be dictated by their crop insurance, right? So hopefully, everybody’s been in contact with their crop insurance. Adjusters are probably just now sort of starting in earnest to look at these fields and start to make some determinations. But my understanding is that, it’s going to take a pretty special scenario for an insurance adjuster to say, “Yeah, don’t harvest this, it’s not worth your time, you know, our time for you to do this.” So in most cases, these fields are going to have to at least be attempted to be harvested, and it’s going to be a huge challenge. I just, I cannot emphasize that enough. Some of them are probably going to be easier to harvest than we think they are, we’re going to have to go slow, we’re gonna have to harvest in one direction. But some of these fields are just going to be very, very difficult, and it’s going to be a real test of patience to get out there and get them harvested. Some of these fields that are maybe so bad, there may be a handful of them that people don’t
actually have to harvest that the insurance adjuster might say, “Yep, we’re calling this zero.” And then we’re going to have to figure out how to deal with all the biomass that’s out there. So whether we can get out there and somehow chop it, or seize it, and disk it or whether the disk can just get out there on its own. And, luckily, we’ve got some ag engineers to help us kind of bounce these ideas around. But it’s going to be a challenge to manage this this fall.

Christa Hartsook 07:12
Definitely looking at an extended harvest season this year in central Iowa, with the speed that they will be able to go at, the one direction, as you mentioned, it’s just going to take a lot longer.

Meaghan Anderson 07:23
Yeah, it’s going to take a lot longer. And aside from just the yield loss, right, everybody wants to talk about yield loss. And it’s going to be all over the board, right? There’s going to be some fields that don’t have much yield loss at all, and are not going to be that difficult to harvest. But there are a lot of fields that will have yield loss. But in addition to that, we’ve got concerns about stock crops, right? What’s the standability of these fields going to be like? How brittle are they going to be as they start to dry down? Are the ears going to dry down very well, if they’re laying down close to the ground, where they’re not going to get so much wind? And everything’s kind of moving slowly through those plants when they’re pinched and the roots aren’t totally in the ground. So are we going to have concerns with ear rots and dry down and white grain? And all those are going to be other factors that are just going to be additional stresses and additional frustration I’m sure this fall.

Christa Hartsook 08:17
Yeah. Megan, in addition to the fields themselves, we had structures damaged across this storm path with elevators, co-op, storage facilities. So we’re looking at a very significant grain storage loss as well. Talk to me a little bit about that.

Meaghan Anderson 08:37
Yeah, I’ve been talking with a lot of people, and the question is always, “Well, have you seen this before?” And the answer is sort of, right? You’ll see somebody sustained some grain bin damage, or you’ll see a few crop fields get affected by high winds or by a tornado, but the scale to which this damage is, is just unlike anything anybody I think has
ever seen. And so that’s definitely going to be the challenge this fall is that it’s going to be a slow harvest, but we can manage that. But the grain isn’t going to store very well to begin with. And we don’t have our permanent storage structures available to us in a lot of cases like we normally do. And so the the just sheer amount of loss of storage is unheard of and astronomical, and I don’t have enough words for it, but it’s going to add just an extra layer of challenge as we try to find places that will accept this grain or that we can get the grain to to get it off our hands in a lot of cases because we don’t want to be holding on to poor quality grain too long. And you know, we talked that the corn is not going to be great quality, but the soybeans are really mostly okay. They’ve been pretty much unaffected. So storage is going to be a challenge for them especially if we’ve got good yielding soybeans and we need to find places to put those beans when we don’t have from nearby access to facilities like we normally do.

Christa Hartsook  10:01
Megan, have we seen any kind of impact yet in terms of USDA forecasting or the market reacting to the storm?

Meaghan Anderson  10:10
I think I’ve seen some small reactions, right? I mean, there’s definitely there’s a lot of people that are just trying to wrap their heads around it right now. And so probably the first immediate reaction that we’ve seen most clearly was that the crop progress report went from I think, 69%, good to excellent down to 59% good to excellent. So we lost 10 percentage points off our good to excellent rating for corn here in Iowa, just in the span of a week. And so I think that is a reflection pretty clearly as to the dramatic nature of the storm that really went through. And I think that we really won’t know the full effect of this until we start getting into harvest and we start seeing really what these test weights are, and what grain quality is like, and where we are actually having to take some of this grain. So time will tell. But I think that so far, there have been some pretty good estimates out about what the effect that this has been. It’s just a matter of ground proofing it at this point.

Christa Hartsook  11:11
Yeah. Absolutely. Any other comments for us, Megan, any other advice for producers out there listening?

Meaghan Anderson  11:19
Yeah. Well, I wish I had some really sage advice. Yeah, I mean, I just my heart. And my thoughts and my prayers are with everybody as they work to clean up from this. And I just hope that everybody knows that, that we're here for them if they've got questions or concerns or needs that Iowa State University Extension and Outreach can help with. I don’t think the crop is probably the first thing on everybody’s mind right now. Right? It’s still in this mode of cleaning up damage and trying to get electricity back in some cases. And I think that the concerns about the crop will come in. We’re here as everybody starts to try to figure out what to do this fall.

Christa Hartsook  11:58
I appreciate all of your work. Megan, I know you've been cataloging a lot of damage, doing a lot of surveying out there. So thank you for all you've been doing.

Meaghan Anderson  12:07
Yeah. Thanks for visiting with me, Christa.

Christa Hartsook  12:09
Thanks for being on the show.

12:10
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