Hello, and welcome to the small farms podcast, a prediction 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 Joe Hannan, commercial horticulture specialist for Iowa State University Extension and Outreach on fruit tree updates for this spring. I'm Christa Hartsook, small farms program coordinator, and we hope you enjoy the show. Joe welcome.

Yeah, morning, Christa. How are you doing today?

I'm good. It's always great to have you back on.

Yes, I love being on here. It's great place to come and chat.

Great. So Joe, we need to talk about some fruit tree updates for the spring, we kind of are coming off a pretty hard winter. What kind of things are we seeing out there?
Yeah, I wanted to come on and talk to you today a little bit. Because we came off such a hard winter, there may be some issues with some of our trees. So I pulled up the notes and went back and looked at January 30. And the 31st when we had temperatures not minus 20 to minus 30 degrees Fahrenheit across the state. Yep. And then the next day, February 1, we still were in that minus 10 or colder. And we started getting minus 20 to minus 30 degrees, we definitely have issues with some of our, our fruit crops.

Christa Hartsook 01:38
So what kind of damage you know, extension do we need to look at and watch for there, Joe?

Joe Hannan 01:44
Well, I would be looking at if you have peaches, peaches tend to the far buds get injured at about minus 18. And so we're definitely below that. And just about everywhere in the state. So I would not expect there to be really any fruit from peaches this year in in Iowa that's just here in Iowa, just because it got so cold. Okay, if you look at sweet cherries tend to see injuries like that minus 20 to minus 25. So depending on where you're at in the state, you may not have sweet cherry flowers, either, and so no crop there. Okay. So I'd love to say, you know, there's a few oddball places where you might get some fruit from either the peaches or cherries, just because you can have little micro climates where temperatures maybe didn't get as cold. But overall across the state, we're not going to have much for peaches and cherries, and that's, that's normal. We don't expect to get a crop from those every year anyway.

Christa Hartsook 02:43
So Joe, let's talk apples, you know, at what point do we really start seeing injury on apple trees,

Joe Hannan 02:48
we really don't start to see injury until we get into that minus 30 to minus 40 degree range. Okay, so the apples should have overwintered just fine. And from what I'm seeing and hearing from our commercial orchards. We have very good blooms coming back this year. Okay, total orchards and things should have plenty of flowers instead of fruit crop out there.

Christa Hartsook 03:11
Good. Good. As we're looking at that flower crop now and kind of getting into pollination, then what do we look for and what's really ideal for conditions?

Joe Hannan 03:21
Well, we are right now in bloom, we haven't quite passed our frost free date yet, for the year. So we have a few more days to kind of skip through, but I don't think we're going to have any
cold temperatures, the weather forecast looks the next couple of days are going to put us down into the upper 20. So that's a good positive sign. As we look at what conditions do we want to have for pollination, you really want warm and dry conditions, warm conditions, so the bees are fine, dry conditions that we don't have problems with fireblight, which is a real common bacterial issue that we have. Unfortunately, we're looking at cooler and wetter temperatures, so that's not great.

Christa Hartsook 04:05

Are there things that we need to do then Joe to kind of combat some of those conditions that we're going to face?

Joe Hannan 04:12

Really with the bees there's not a whole lot you can do. We'll have some warm temperatures and warm afternoons here and there during the pollination period where we still expect you to have a very good fruit crop set. I've been watching the forecasting or the modeling for Fireblight if you plugged in the weather conditions into the merry blight model. Right now it looks like the cooler temperatures even though we're getting rain will keep fireblight from reaching threshold. So we're not expecting any fireblight issue as of right now, as we're recording. And when I was looking at the models yesterday, it looked like we might run into some challenges with fireblight as we're looking at warmer days and warmer nights, but right now I think we might escape having that issue.

Christa Hartsook 05:04

Joe, talk to me a little bit about that merry blight program.

Joe Hannan 05:08

Yes, so merry blight program is a free software package that you can download to a Windows computer and use it to predict when a fireblight infection could occur on the vegetative parts of the tree or the flowers on the tree. Really, it's a tool for commercial orchards to go through and use to make smart decisions on when they're going to need to make a pest management application to keep Fireblight under control. The programs free, it's pretty easy to use has a very good instruction manual on how to use it. I've been using it the last couple of days to kind of look at where we are with fireblight for the commercial orchards and things. So it's, it's free, it's very easy to use.

Christa Hartsook 05:53

Okay. Joe, in terms of kind of control or minimization of fireblight, if we're on that commercial orchard scale, will that married like program, you know, help us to predict when we would need to apply anything? And then what would we need to apply?
Joe Hannan 06:09
Yeah, the merry blight program. It gives you updated information as of the current date, but it also has a prediction programming built into it, where you can insert the high temp low temp and moisture conditions, predicting out several days in advance in order to determine if it looks like you're going to need to make a pest management application for fireblight. And when that occurrence, will be. So that's a really helpful tool to help you plan. When do you need to get into the orchard and get a application on? Commercial orchard. So using things like strep myosin, it's an antibiotic product. They're using things like apogee, which is a plant growth regulator to actually slow down the growth of the tree, which inhibits the movement and development of Fireblight. And then a handful of other products on the market. But those are the two most commonly used ones here. Okay.

Christa Hartsook 07:11
Joe will talk to me a little bit about some of our other crops, you know, our fruit crops that we're going to have out there are raspberries or blueberries or strawberries, do we need to think about any winter damage or issues with those,

Joe Hannan 07:23
I'm really not too concerned about the raspberries, blueberries or strawberries. There could be a little bit of localized injury here and there, but I think they if there is I should come out of it pretty well and wouldn't expect any major issue. So blackberries on the other hand and it got way too cold for Blackberry. So if you have blackberries planted out there, just kind of cross this year off and look forward to next year.

Christa Hartsook 07:50
Okay. Sounds good. All right, Joe, anything else that we need to talk about today?

Joe Hannan 07:55
No, let's just hope for some dry conditions that the forecast isn't quite as good as they predict.

Christa Hartsook 08:02
I think every farmer would appreciate that.

Joe Hannan 08:04
I think we can all appreciate it. Nice warm weekend and a couple of days in the next week.
Christa Hartsook  08:09
That sounds great. Joe, thanks for being on as always.

Joe Hannan  08:12
Thanks for having me, Krista. Appreciate it.

Christa Hartsook  08:14
Yep, take care.