

Late Spring Update for Fruit Crops

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SPEAKERS

Patrick O'Malley, Iowa State University Extension and Outreach, Christa Hartsook, Olivia Hanlon

C Christa Hartsook 00:15

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.

O Olivia Hanlon 00:29

In this episode, I visit with Patrick O'Malley, commercial horticulture field specialist with Iowa State University Extension and Outreach. Today we are doing a late spring update and talking about low soil temps and how those affect our horticulture crops. I'm Olivia Hanlon small farm sustainability extension specialist and we hope you enjoy the show. Patrick, welcome. We're glad to have you joining us today.

P Patrick O'Malley 00:52

Yeah, nice to be here.

O Olivia Hanlon 00:54

Patrick, I know we've had you on before, but it has been a while. So why don't we start out with you giving us a bit of a refresher on what it is you do in your role here at Iowa State and a bit of an update on what you've been up to lately?

P Patrick O'Malley 01:06

Okay, well, I'm a commercial horticulture field specialist with Iowa State University Extension, I work primarily on commercial fruits and vegetables in the eastern third of the state. And I've been doing this for well over 20 years. And I guess what I've been up to lately been doing some

programs that not so much the year before, but doing some programs, most recently fruit tree pruning programs at various locations, and was glad to get outside and move around and do those sort of things.

O Olivia Hanlon 01:38

Yeah. And it's especially good for us to be seeing people again, right, Patrick?

P Patrick O'Malley 01:42

Yep, yep.

O Olivia Hanlon 01:44

All right. So let's get started with our spring update. How is our spring looking at this point,

P Patrick O'Malley 01:50

From the point of view of a fruit grower, you couldn't have a better spring, maybe not so much for the viewpoint of the vegetable grower that wants to get out there and get stuff planted. But for the fruit grower that has existing fruit trees, or even strawberries, this, this is the kind of spring that's ideal because everything's late, everything's at least at least a week behind normal. And what that means is the the flower buds, the vegetation of the various fruits are not as susceptible to late spring frost as they normally would be, they're much less likely to have a hard frost to injure them. We're looking back to the low if we wanted to go with historical here, but 2012 was the exact opposite, where everything got really, really warm early. And then flowers came out early on the fruit trees, that froze off in April. And basically everybody lost a crop in 2012, where this year, the odds are very good that there'll be a nice crop of fruit this year.

O Olivia Hanlon 02:56

Okay, Patrick, it seems like everyone has been talking about our soil temperatures lately and about them being a little bit low. How are those looking across the state or even just in your neck of the woods over there.

P Patrick O'Malley 03:09

soil temperatures are much lower than normal for this time of year with the rains that we're getting, that might warm up the soil a little bit plus getting some warmer temperature the next few days, although then it cools off again, but definitely cooler than normal. One thing I'd like to look at with soil temperatures is this is also the time of year where people start hunting morel mushrooms, okay. And usually they would have started by now. But there's various criteria when the mushrooms actually come out and so forth. One of many different criteria, none of

which is foolproof, but one of them is when the soil temperature at the four inch depth is 53 degrees is when they started to come out. And we are anywhere close to that right now. We're basically depending on where you're at somewhere in the neighborhood of 45-47 degrees at the 4 inch depths. So again, it's another indication that things are cooler than normal things are going to be later than normal.

O Olivia Hanlon 04:04

So Patrick, obviously, it varies across the state. Could you tell us a little bit about the Iowa State resource for soil temps and how people can find out what the soil temps are in their area?

P Patrick O'Malley 04:14

Yeah, there's a site called mesonet, m-e-s-o-n-e-t, that will have the soil temperature depths at the 4 inch depth at various locations across the state that's actually measured and then just kind of extrapolated through all the other counties that don't have the actual weather station. Can we put up that link or?

O Olivia Hanlon 04:37

Yep, yep, that link will be in the show notes.

P Patrick O'Malley 04:39

Yeah. And then that basically, that gets updated every day. So it's usually like one day behind. So like today, you're getting yesterday's soil temperature, and then tomorrow, are you getting to the soil temperature?

O Olivia Hanlon 04:51

Makes sense.

P Patrick O'Malley 04:52

It's a good indicator.

O Olivia Hanlon 04:54

Yeah. So Patrick, this question is obviously going to depend on where you're at in the state right now, but based on our rains we had this morning, but where are we sitting at in terms of moisture,

P

Patrick O'Malley 05:05

Depending where you are in the state, it's a belief at least 38% of the state or so is under some sort of abnormally dry to beginning drought stage. That's that's entering this week. Hopefully, things will clear up i It does look a little troublesome, maybe that western Iowa, there are some spots in western Iowa that may not get as much rain. And there's, that's where the the worst of the drought is, right now, there's a little spot in western Iowa. But a lot of the state is what was either normal or abnormally dry. And I think a lot of that may be cleared up next week, when they release it again, that maybe there won't be drought situation in most of the states or maybe a little bit in western Iowa, hopefully, if we get enough rain, and it's widespread enough, but it is looking promising.

O

Olivia Hanlon 05:51

Okay, Patrick, I don't know about you guys over there in eastern Iowa. But this morning, we got pretty drenched here in central Iowa. That was kind of nice to see.

P

Patrick O'Malley 06:00

Yes, we're getting that too. And we just had a really very close lightning strike too, which brings up a point that maybe people don't realize is your grass is really going to green up after this rain like this. And if you do get lightning and so forth, that actually the rain will have nitrogen in it. So it's like getting like a free source of nitrogen. Not a lot, but some but it's natural rainfall with lightning is really, really good for like turf grass and other plants as well.

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Olivia Hanlon 06:29

Okay, I didn't know that. Patrick, thanks for sharing. So you mentioned western Iowa might stay in a little bit of a drought. I know there's also a resource out there for folks who would want to find a Drought Monitor. Could you talk a little bit about that resource for us? And I will also put this link in the show notes.

P

Patrick O'Malley 06:47

Yeah, there's a website. Surprisingly, it's, I guess it comes out the University of Nebraska Lincoln, but the they host the website, whatever. Anyway, it'll be in the show notes. And you can click right on that and see the state of Iowa and see what part of the state is and what part of you know, whether normal or abnormally dry, or D-one, the first class of drought or D-two, class of drought. And again, that's updated weekly. And so you can see how it improves each week. Hopefully it improves.

O

Olivia Hanlon 07:17

Hopefully it does. So when we're looking at our soil temps here, Patrick, what kinds of temperatures do we need in order to get some of our crops in the ground that may not be

already out there.

P Patrick O'Malley 07:28

Generally, we're looking at a four inch depth. Ideally, your cool season crops your spinach, your lettuce, those sort of things. Cabbage, you really want to soil temperature about 50 degrees, okay, people cheat on that a little bit and maybe do 40-45. But 50 is when we really start to get the good growth on those cool season crops. The warm season ones like your melons and your sweet corn and your tomatoes and your peppers. They really would like at minimum soil temperature of 60 degrees. Even that's a little cool for them, especially something like eggplant is a little more sensitive eggplant, you probably want to wait to least 65 or 68 degrees. But the bare minimum for the warm season ones would be about 60 degrees.

O Olivia Hanlon 08:16

Okay, so we've got a ways to go there.

P Patrick O'Malley 08:19

We've got a ways Yes.

O Olivia Hanlon 08:20

Is there anything else that we need to be thinking about in terms of spring care, Patrick, maybe mulching soil testing, things like that?

P Patrick O'Malley 08:30

Well, it's always good to do soil testing to see where you're at. If you soil tests, it's a good idea to do at the same time of year so you'll get consistent results from year to year. Okay, so if you soil tested, say three years ago in the spring, you know, now's a good time to do that, again, as probably many of the listeners know that Iowa state doesn't currently do soil tests anymore, unfortunately. And so what we've been recommending is numerous private labs you can go to but the if you want a public option the University of Minnesota and University of Wisconsin do a good job for for soil testing.

O Olivia Hanlon 09:10

Okay. How about mulching? Patrick, do we need to be doing any of that right now?

P Patrick O'Malley 09:15

Mulching is is good for many reasons. Yeah. wood chip mulch is a is a good product to put

down. You put it around the base of a tree. You can spread it as far around the tree as you want. So some people go out as far as the drip line. Some people just do maybe a maybe a two foot diameter circle around the tree. The key is when you put the mulch on put about two or three inches and make sure that the mulch isn't in contact with the trunk of the tree. Okay, because if it's in contact that will stay moist, and that's more likely to get a fungal disease and and I like to use wood chip mulch on fruit trees and ornamentals as well because it kind of looks nice, but And also, over time that mulch breaks down and kind of slow releases nutrients to the tree roots. And so it's kind of a easy way to fertilize. It's just by mulching and every every three or four years refresh the mulch.

O Olivia Hanlon 10:13

That sounds good. Patrick, is there anything that we haven't heard about this spring, or maybe things that people should be considering at this time of year that you want to add?

P Patrick O'Malley 10:22

Well, we're, normally we'd be pretty much done with all the pruning at this point. But again, things being so late, you could probably still do a little bit of pruning. I would caution if anybody has any peach trees, especially if they're south of highway 20. And they have peach trees that maybe minimize any remaining pruning that you do on them, because this is going to be one of those rare years where you get peaches. The reason being that probably, we probably won't have a late spring frost and also, the peach tree flower buds, they start to get injured at minus 15 Fahrenheit in a good share of the state did not get as low as minus 15 Fahrenheit actual temperature during the winter, which means the peach tree flower buds survived. And that could be a big picture for Iowa, although we don't really have that many trees. It's still a tree ripened peaches is one of the best fruits ever.

O Olivia Hanlon 11:15

Yeah. Awesome. Well, Patrick, if anyone's looking for more information, whether it be on weather trends right now, or any of these basic spring upkeep type of things for your fruit horticulture crops, where should they go? Or who should they reach out to to find that information?


P Patrick O'Malley 11:34


If it's consumer horticulture related, we've got Aaron style on campus is a good resource. Or just basically just go to your local county office and ask these questions. And if they like they can put you in contact with the people that know the answers. So just again, your local extension office is a great place to start.


O Olivia Hanlon 11:56

Okay. Awesome. Thank you very much for joining us today, Patrick. And for everyone tuning in. Make sure to check out those show notes for the links for the soil temps and the Drought

Make sure to check out those show notes for the links for the soil temps and the Drought Monitor.

 Patrick O'Malley 12:07
Great. Thank you.

 Olivia Hanlon 12:09
Thank you, Patrick.

 Iowa State University Extension and Outreach 12:10
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