

Wisconsin Horticulture Update: Friday April 30, 2004

County roll call - Barron, Brown, Dane, Eau Claire, Jackson, Milwaukee, Monroe, Pierce, Portage, Price, Racine, Rock, St. Croix, Washburn, Waukesha, Wood

Phenology

South Central

Nothing reported

South East

Bleeding Heart FB (Full bloom)

Red Bud FB

Magnolia Soalngiana FB

Amelanchier FB

Dandelion FB

Creeping Charlie FB

Garlic Mustard FB

Scilla Siberica FB

Forsythia FB

Daffodils FB

Korean Spice Viburnum Fb

Mosquito 1st bite (Waukesha)

Tent Caterpillar larvae spotted European Pine sawfly 1st instar
little gold stage

North Central

Blood Root

Spring Beauty

Rue Anemone

Wood ticks (Eau Claire) soil temp 48 degrees

Central

Scilla FB

Forsythia FB

Daffodils FB

Dandelion 1st Flower

1st mosquito bite

County Reports

Spooner – There are some powder post beetles up here. They are about ½ the size bigger than the other ones we've had and they are darker colored, more like a black color.

Milwaukee – I had people ask me questions about daffodils that aren't flowering. The leaves come up but no flowers. These are gardeners who have had success with them before. The other is a lot of dieback with the spruce trees.

Dane – We are keeping track of growing degree days on the Dane County website. We have a weekly report that goes up for that.

Entomology – Phil Pelletteri

First mosquitoes shouldn't get you too concerned. What those are are some of the overwintering species that as soon as it warms up are out there. The real wave of mosquitoes are about 3-4 weeks away just the way the temperatures are going. In the northern part of the state we're a little bit nervous about the amount of flooding that usually suggests some good numbers in the future. In the southern part of the state, it's pretty much on the dry side so I think we're pretty good there. I did some investigating, we have been without this rose chafer attractant for the last couple of years and I got a chance to talk to the people at Great Lakeside PM and the good news is that they are developing this product, but they have to register it with EPA and they've been having some stumbling blocks there. It's not a question of not being available in the future, but it's a question of when they get the grant from EPA. Unfortunately by the time they get this through, it will be past the rose chafer season, which is about the 15th of June in Wisconsin.

We saw our first gypsy moth egg hatch

<http://www.uwex.edu/ces/wihort/gardenfacts/X1063.pdf> usually in the very southern exposures in the southern part of the state. With the way the weather patterns look in the southern part of the state, I think after we get through this cool weekend, things are going to start moving pretty quick. People have to gear up for that where they've had some problems. Same thing with euonymus caterpillar, they will be hatching quickly. As reports come in from some of these more advanced sites, the tent caterpillar is getting active. I think the big issue with all those creatures is that if you catch them early they are easier to deal with rather than later.

Lastly, some of you may have been getting questions, the Dept. of Ag released a press release on the giant African land snails. These are exotic pests. There is a real tragic story about them escaping down in Florida about 20 years ago and it cost them over a million dollars to eradicate the problem. Here it isn't as much a question of them escaping outside because they probably can't survive a winter. But if handled, they do have a virus associated with their mucus that can cause meningitis in people. This is basically an actionable pest and the Dept. of Ag and AFIS(?) are trying to educate people that they are not legal to have these and they should be destroyed if you do have them.

Bob had asked about the plum curculio <http://ohioline.osu.edu/hyg-fact/2000/2043.html> issue and that insect really doesn't have anything in the way of reasonable traps and the like. The big issue is that most of the attack is going on after we get petal fall and we have that young fruit. That critical time is that first petal fall and that first cover spray. Where we see people goof up a bit is different cultivars, different things have different flowering dates and so if you're trying to use a uniform treatment for things that may be a week to 10 days apart, you will find you will miss some things so that will be the biggest concern, that you time your application to the maturity of the plants rather than using calendar dates or thinking that all of the trees can be treated the same day. As I said, at

first petal, spray and the first cover is the one that basically protects you from most of the plum curculio damage.

Questions:

When we go the snail question up here, the TV said people are supposed to contact the Dept. of Ag, but I don't know if that is always necessary? Is that a necessary step?

I think they want to make sure they are killed. The two options are to throw them in a pot of boiling water or to throw them in the freezer for a few days. I think people can probably dispose of them themselves. But I think the big question is to make sure people are aware that these are not legal to have and aren't carrying them around as pets.

We've already seen the gypsy moths have hatched, I've had a couple calls in from people who have said they are crawling on the side of their house from the egg masses. But the leaves aren't in the trees yet, so what is the best way to try to control them if you can see them on the side of your house crawling around?

Basically you treat them with any of the indoor or outdoor nuisance type insecticides. It's a surface treatment. As they crawl across, it will knock them out.

One thing with gypsy moths is that they will eat the buds if they are green. Our oak buds are green by now. When the leaves come out, they will be full of holes. They won't go hungry even now.

There is enough flush of growth that I think things will take off pretty quickly next week.

I just saw an email that said Diazonon is being taken off. What are some of the replacement products or is there something on the website that says?

They are all pyrethroids – promethryn, cyfluthrin, lambda-cyhalothrin. To show you how crazy it has gotten, I checked three products, the Raid Ant spray, Raid Roach and Ant spray and Raid Ant and Roach spray. They are three different products, but they are all pyrethroids. It's similar chemistry and there really aren't a whole lot of new dynamic products out there other than the systemic products out there that Bayer has. The one whole that we have in the outside garden is preplant garden insecticides for grubs and wire worms. That's where diazonon was probably the only product we used. Sevin does have label in some cases, but when you put it on the ground it just gets soaked up and it really isn't effective. There is a whole there that we really don't have good substitutes for either products aren't labeled or don't work effectively enough to work for the cabbage maggots <http://www.uwex.edu/ces/wihort/gardenfacts/X1018.pdf> and all those root kinds of pests we get into.

There was one other question about powder post beetles.

What was the host? Was it flooring or firewood? What was it coming out from?

Interior wood in the house. I don't have all the notes, but probably the trim and stuff.

The size of the beetle is somewhat nutritionally related. A lot of the true powder post beetles do get almost black in color. I would be a little suspicious; it might be a different species or one that's fed a little bit better than ones you've seen in the past. But that's classic powder post beetle

<http://www.oznet.ksu.edu/library/ENTML2/MF1125.PDF> .

I've been getting a lot of questions about new ash and I've had conversations with people in other parts of the country about some of the problems with ash in particular. There was a shortage of high grade 1 ash so there was a lot of junk stuff getting into the market that's more prone to having some of these problems. I think the main thing is that people tend to overreact and think that these will destroy their house in a short amount of time. In powder post beetles they are relatively slow to work especially in normal construction that is heated and the wood is dried out in the winter. Some of the treatments are to strip the floors or wood and put borates on or in some cases it's cheaper to replace the couple pieces of trim or whatnot and not worry too much about it.

They have wings that stick out a little bit in the back on them. Is that the powder post beetle or something different?

It might be something different. Powder post beetles don't like to fly very often, especially with the cooler temperatures we have. If you are seeing wings very easily, that might be some other critter that I would like to see.

I have some grub worms here that are about an inch in length. Just a quick update on Japanese beetle grubs and white grubs in terms of what we are looking at this time of year, what will we see?

If you have grubs over an inch in length, they have to be white grubs <http://www.uwex.edu/ces/wihort/gardenfacts/XGrubCntl.pdf> . Japanese beetles don't get quite that big. Japanese beetles don't do a lot of damage in the spring. We get hammered in August and September. White grubs have up to a 2-3 year life cycle and depending on the size, you could continue to have lawn damage all season long. That gets quite confusing for people. That's why we need the grubs to be identified properly. You have to look at the tails. The white grubs have a series of spines that line up just like a zipper and it is really well defined. If you look at the tail end of a Japanese beetle, there is no zipper. There is a series of kind of randomly spaced spines, very loosely patterned. What it comes down to is that white grubs could be valid to treat if they are still there this spring. Probably Sevin or Dilox is the best rescue, just like in Japanese beetle. If it is true Japanese beetle, forget it for this generation. We gear up for the generation that will come out in July. That's either treated preventively with Grubex(?) or the Merit products, or the rescue treatments that Chris talks about are put on in July and August and then again we're talking the Sevin and Dilox products.

This one does have the zipper, so it is the white grub. I was doing some gardening and saw some June beetles. Will they be coming out too?

It's probably a couple of weeks yet, and we need some warmth. The normal flight period is May and June. Those critters have been in the adult stage in the ground for probably 8-9 months. That's why when you get 1 ½ or large white grubs, you know they will be finishing up and pupating this spring to early summer and then they emerge the following spring. That's the way the lifecycle goes.

General Horticulture – Bob Tomesh

In terms of plants, I did a fair amount of traveling this week across the State. Parkside next to the lake is just beginning to green up. If you go up through Dane county and westward, the oaks are even leafing out already. They are quite far along. As you go northward, once you get above highway 23, they are just starting to show bud up in some of those areas. It's really set back up there. If you watched some of the weather patterns this past week, they've had some cooler temperatures. Even a few snowflakes were reported above LaCrosse.

In fruit, continued requests for disease resistant crabs <http://www.uwex.edu/ces/wihort/gardenfacts/X1012.pdf> . We must be doing a pretty good job of alerting to that, or they are in the replacement process because we've had about 4-5 bad years of apple scab. I spoke with someone last night who said they just decided to replace their crabs because they lost most of their leaves these last couple of years and they were looking for something different. Pears and plums are starting to come into pretty good bloom. Plum curculio was bad last year and maybe this year. Teryl can comment on that.

Some interesting things when I was in the process of pruning the grapes. Some of those that are kind of borderline, like the one Minnesota has released, 'Frontenac', it took a fairly hard hit last winter with the cold temperatures and exhibited a fair amount of dieback. What was interesting was the cane growth for this last year was relatively short compared to other varieties I had in the plots. I know some of the growers over in Minnesota had reported respectively that the 'Frontenac' hadn't responded well to winter stresses. It will be interesting to see how well it comes back this year.

In vegetables, if you go to some of your local garden centers and nurseries, who are fairly well established. They should have some of the early season cold crops, which could be set out. Many of the black top garden centers are just getting their materials in this week. I've seen stuff sitting in the box far too long and looked rather leggy, because it was too warm and it started to grow. Be very cautious when you are out there looking at some of those sales. There were some rhododendrons that were normally priced at \$10 on the pots and were on sale for \$1 a piece because they had been put in storage for too long and were starting to show some (yellow) shoot growth. Some of those with a little bit of care could be brought back around.

In flowers, some of the cooler tolerant types of transplants like pansies, etc. will survive some of the cooler temperatures. It looks like we have some 40 degree temperatures and even cooler for some parts of the state coming in this week.

In trees and shrubs, it's a good time to be transplanting the bare root materials. I visited Jung's Garden Center and they had a good selection there, but I'm sure some of the other nurseries have good selections too. Some of the containerized materials have leafed out extensively and if we have some cooler temperatures we might see a little bit of damage although we're getting a little late for that.

In lawns, crabgrass preventer, although I think in southern Wisconsin we might be getting a little late for that. Above highway 23, things are still good for applying the crabgrass preventer products.

Questions:

There was a question about daffodils. There are lots of blanks out there, they just aren't flowering. Does anyone have comments on that?

Many of those perennial daffodils, and tulips, etc. will grow every year, but it doesn't mean they will have a blossom. Part to the stress factors that may have caused this, the drought might have come on a little sooner than they got established because those flower buds we expect now, were initiated last year. If for some other reason, there is drought stress when you relocate daffodils. Many times the following year of relocation, you only have leaf tissue because the growing point is the last location to receive water and that's where we see the damage. I would encourage them to get a good fertilizer program in place. That will help to enlarge the bulb and make it a little healthier and help it to initiate flowers for next year. Generally we can figure about 6 weeks after petal drop is when most of that formation is occurring on the daffodils and tulips.

Plant Disease Clinic – Brian Huddelson

Conifers

- Phomopsis tip blight (*Phomopsis* sp.) on spruce (including blue)
- Dothistroma needle blight (*Dothistroma pini*) on Austrian pine
- Rhizosphaera needle cast (*Rhizosphaera kalkhoffii*) on spruce (including Black Hills)
- Water stress on fir (including Fraser, white), spruce (including blue)

Herbaceous Ornamentals

- Root/crown/bulb rot (*Pythium* sp., *Rhizoctonia solani*, *Cylindrocarpon* sp.) on *Allium*, *Eremurus*, fuchsia, impatiens, rhodochiton,
- Downy mildew (*Peronospora grisea*) on Veronica
- Ethylene injury on petunia
- Chemical burn on miscellaneous begonia and *Datura*
- Edema on tulip

Vegetable Crops

- Pythium root rot (*Pythium* sp.) on cucumber, tomato, potato

There's not a lot to talk about this week. We're getting a lot of greenhouse materials come in with a variety of problems. I think I talked about that last week. I don't know if the greenhouse industry has just discovered the clinic, or what's going on but it's been kind of unusual to see all that sort of material coming in. Just as a reminder, we do have the ability to test for some of the more common greenhouse viruses right now. We have pretty good test for impatient necrotic spot virus, tomato spotted wilt virus, tobacco mosaic virus and also cucumber

mosaic virus. We basically have the equivalent of a pregnancy test for those particular viruses. It's just a little dip stick test. If you know people who are interested in testing for those things, we can do a good job. We also have similar dip stick tests for Xanthomonas compesterous, which causes bacterial blight. The test is specific for the pathovar for geraniums. Other than that, if there are questions, please let me know.

Questions:

We had a question about spruce trees dying.

It's probably a combination of factors. I think a big contributing factor is drought stress from the past couple of summers. I've seen a lot of samples of that sort in the clinic this spring. Typical kind of purpling or browning of needles, oftentimes at the tips of the branches, lots of times starting at the tops of the trees and working its way down. That's usually a fairly classic symptom of a water stress issue in the tree. I think given our weather pattern, drought stress is the most likely explanation for that. Folks should be looking for other things that limit water availability uptake into the plants and includes root rots. It could be salt related, if the tree is near a sidewalk, driveway or road. Also check for girdling roots on trees. This can cause similar sorts of symptoms. Other things to look for if it is a newly transplanted tree or shrub make sure any of the cords that connected the tree to the wire basket when the plants were bulbed in burlap, make sure that's been removed. We have seen situations of girdling due to the cords and that's induced these general decline sorts of symptoms. Some of it may be a carryover from the winter of 2002-2003 where we had little snow cover and it is actual physical cold injury to the roots of those trees. I think it is a combination of things depending upon the particular situation where the tree is located. But a lot of it is drought stress.

The other tree that we may see symptoms showing up in this year is white birch. Usually after we've had a dry year or two, we start seeing some dieback on major branch portions or trunk portions and it's trying to save itself by self pruning larger branch units. That would come about late June, early July I'm guessing.

Fruits – Teryl Roper

With the fruit trees developing along and the prospect of cooler temperatures over the weekend, frost is always on peoples minds this time of year. If you have our Commercial Pest Management Guide for Tree Fruits, A3314, near the back of that, there is a chart showing critical temperatures for apples, pears, peaches, tart cherries and plums. Right now from what I see, commercial apples are from tight cluster to open cluster. The critical temperature there for 10% kill is 27-28 degrees. If we get temperatures at or below that, we will have some injury. To get a 90% kill, that would really be devastating. We'd have to get below 25 degrees. I don't think we're going to hit that in southern Wisconsin and I don't think people in the north are even that far along. So I think we're okay. Normally, Gays Mills in Crawford County has their apple festival on Mother's Day weekend but we have another week for that and I think we're still okay. The long-range forecast is for warming temperatures. If people are concerned about that, usually the critical temperatures we get closer to bloom is 28 degrees. Below that we get some injury, above that there shouldn't be any.

I've already started to get calls and emails about unwanted fruit, particularly apples and crab apples. I had a call about Florel, a fruit thinning product for removing unwanted fruit. While that works, it's not my material of choice. It releases ethylene. You could get some leaf burn if it turns out warm after application. The insecticide Sevin is a very effective fruit removal agent for apples and crab apples. The first application should be at petal fall and that means with all the petals off, not just when most are off. The insecticide, Sevin, is toxic to honey bees and you want to wait until all the flowers are off the trees. Usually $\frac{1}{2}$ to $\frac{3}{4}$ strength is sufficient. Apply enough spray so the wetness begins to drip from the tree. The activity of Sevin as thinner or fruit removal agent is not entirely concentration dependant so if a little does a little; it doesn't follow that a lot will do a lot better. The better approach is to do a single application at $\frac{1}{2}$ to $\frac{3}{4}$ strength, followed by a second application (at $\frac{1}{2}$ to $\frac{3}{4}$ strength) a week to ten days later. That should remove most of the fruit. The thinning action is dependent on a number of factors. When we get slow drying conditions - calm, humid, cool, cloudy, we get greater thinning action. If we get best drying conditions where we have a little bit of wind, sunny, warm, then we get less thinning action. That's the word on removing unwanted fruit. Probably the best way to remove unwanted fruit is to cut down some of those old, unwanted crabs and replant some of the disease resistant flowering crabs that have persistent fruit and then it isn't such a problem. The same is sort of true of some of the older culinary type apples. Get some of the newer disease resistant materials that people will be able to harvest by the end of the season and they won't be dropping off on the sidewalks.

The next topic I have is the vegetation around fruit trees and keeping that area around the fruit trees vegetation free. Round Up is very effective at controlling the initial vegetation, lawn grass in particular. Mulching around the trees, that's really good horticulture. The radius is 2-3 feet around the trees. It prevents mower blight. String trimmers are good enemies of young fruit trees and a good layer of mulch is a really good way to control vegetation around the trees. The other thing to think about if you get people calling in and their fruit trees flower but don't set fruit. One of things you will want to ask about is the use of 2, 4-D, Weed and Feed lawn fertilizer kinds of products. They put that out this time of year and if they get a good hot day, the 2, 4-D will volatilize and the synthetic auxins are good thinners and they can burn all the fruit off the tree probably for the first 2-3 weeks after petal fall with an application of a weed and feed product if it is put on in hot weather.

I wanted to talk a little about pruning. I don't think we're too late particular in the northern areas to prune fruit trees. If people are calling about that I think we have a couple of reasonably good bulletins on pruning. One that is training and pruning apple trees and then the individual growing apples in Wisconsin, growing pears in Wisconsin, growing apricots, peaches, plums and cherries in Wisconsin have sections on pruning. People get really concerned about pruning. In apples and pears, as we get warmer, the chance of transmitting fire blight certainly goes up. With stone fruits, that's not a problem, so if they have peaches, plums and cherries, that are overgrown, get out and prune them. Apples and pears are still okay, but I think as we get into warmer weather, it's just a matter of paying attention to fire blight. If that's been a real problem on their trees, then they want to be more cautious. If it hasn't been a problem, then I think they can prune with abandon.

Some calendar things that are coming up this summer:

There is an apple IPM field day aimed at commercial growers, on July 1st.

The apple field day will be July 26th at Oakwood Fruit Farm in Richland Center.

The berry field day will be August 6th at Poynette.

Wisconsin and Minnesota will host the IDFTA, the International Dwarf Fruit Tree Association summer tour. It will be headquartered in La Crosse from June 21-22.

There is a fee to participate in that because it will be on tour buses and there are meals involved. We're trying our best to get some publicity out on that. The focus of the tour will be 'Honeycrisp' and all of the orchards they are going to visit have planted Honeycrisp several years experience growing it.

Questions:

Might there be any kind of control for other kinds of fruit trees, or are these control only for apple?

There is some thinning action on pears, but not on stone fruits. If people have flowering plums, I can't help them.

Some people are asking if they still have some buckthorn, is there anyway to knock the fruit off?

I don't know the answer to that.

People are saying that there isn't that much fruit on some of these tall hedge glossy buckthorns and they don't want to take them out and we are recommending they take them out, and then they ask if they can remove the fruit. I didn't know.

I don't know. I'm kind of doubtful.

I had a question the other day about Pipestone. That needs a pollinator? It's a plum.

Yes.

What is the recommended one?

Kaga, and the other is Toka. That is outlined in our stone fruit bulletin what the pollination requirements are. In the home fruit cultivars for northern Wisconsin, that is spelled out as well.

Do you know of anyone in Wisconsin that would be in the business of sterilizing soil? Particularly this is a strawberry grower who is interested in doing some type of soil sterilization for weed control on new beds.

There are a couple of ways to do that. There are people who do custom fumigation. They will inject the fumigant and varpan. That's best done in the fall when soil temperatures are warm. If they are renovating strawberries the time to do that is in the late summer to early fall. This time of year is not the time because the soils are cold and the fumigants don't work as well. The other approach that is used and I don't know of anyone in the state that does that is

steam sterilization where they inject steam. I suspect that would be really expensive, given the price of propane currently. I suppose the third way it could be done, but I don't know of any research that's been done in Wisconsin, I know this has been done in other areas, particularly the West, is with solar sterilization, where the field is tarped with clear or black plastic. You try to get as much heat build up under the plastic that you can. Perhaps a better way for controlling weeds in a strawberry patch is to have enough land you can rotate out of strawberries for a year or two and plant something else that has a different herbicide spectrum so you can control some of those troublesome weeds than you can use on strawberries. Some of the small grains come to mind and then they can use the straw for mulching their strawberries.

In regards to training apple trees, what is the ideal time to put those spacers in the tree to train them out?

Now, or when they are pruned is fine. They need to stay in until probably the first of July. By then there will be enough wood that's formed that the branches will stay at that position if the weights or spreaders need to be taken out.

It's not too late to do it at the present time?

You need to do it before we get much growth on the outside of the limbs. It's not so much the length; it's the growth of the vascular cambium. As long as the vascular cambium is active, the spreader or weight needs to be there. Once that slows down so that the wood is already in place, then you can remove the spreader and the limb will stay pretty much in the same position. If you don't get it in before the vascular cambium begins to produce xylem, then you are too late.

As quickly as possible now then. In regards to another person who brought in some strawberry plants. He got them from Guerne's Nursery and apparently he was giving them away. Not sure if he decided if they weren't any good or wanted us to tell him, but they were called Whopper. Do you have any knowledge on the Whopper strawberry?

I don't have any experience with it. I have no idea what it really is.

We might plant a few out. They claim they are as large as tennis balls so, we'll have to see what happens.

I will speculate that they could be some of the day neutral materials that have been developed for warm areas, California and Florida, and they may not be cold hardy.

We'll probably plant a few out and if people want to try them we'll see what happens.

Soils - Sherry Combs

I read the question in the 042304 WHU about soil test results and can't resist putting my 2 cents in. The Madison and Marshfield Labs have the new recs (recommendations) program that reports results based on turf blend fertilizers. Wayne Kussow designed the recs for turf and I fit other landscape crops to his

model. His research data show that turf grows best if 1 lb N/1000 sq ft applied 3 or 4 times per season at holidays (Memorial, 4th July, Labor Day and Halloween). The recs for turf will always be that amount. P and K will vary depending on soil test and reflect whether any starter (high P) or winterizer (high K) is substituted for one or more of the regular (high N) applications. Other landscape plants may have the N adjusted for soil OM if the info was available.

The private labs have had the info for turf for many years now but do not want to invest in programming. My plan was to reinvent the program to minimize the confusion now that we have had a couple seasons to go on and then offer the program to the private labs for a fee. I do not know what will happen to the landscape plants make-over now.

N tests are not routinely run because N in soil exists in many different forms, none stable enough to base a rec on. The exception is for the 3 ft profile sample taken for corn where the amount of NO₃-N can be used to adjust N recs.

General Questions:

Announcements:

Watch for updated Fact sheets on the Hort website to go up in the next week or so.

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For suggestions or responses, please refer them to:
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