



Just Picked!

Volume 17, Issue 2

In this Issue

Article:

Understory Groundcover Q & A

An Interview with Annie Klodd

University of Minnesota Extension

Pollinator Research Opportunities:

WiBee: The Wisconsin Wild Bee App

Colleen Satyshur, Outreach Coordinator

Pollinator-dependent crop survey WI

Dr. Hannah Gaines Day

Upcoming Micro Farm Tours:

Saturday, June 19th near Antigo, WI

Saturday, August 14th near Montevideo, MN

Thursday, September 9th near Duluth, MN

Friday, November 5th near Madelia, MN

Contact Information

Coordinator: Amy Bacigalupo

ofgacoordinator@gmail.com

From the Coordinator's Desk

This weekend I was so thankful to be a fruit grower. The temperature was in the low 60s. Low temperatures have kept the gnats and mosquitos from hatching in multitudes. The act of going cluster by cluster for thinning while creating a mental inventory of this year's crop makes me hopeful. There are never enough hours in a day this time of year but I can't help but appreciate that I get to be out in the orchard, a witness to abundance and a part of the natural cycle.

I hope that you will find a moment after a long day in the orchard to take a look at this issue of Just Picked! Connect with what's up and coming up at OFGA. This issue features an interview with Annie Klodd from the UMN Extension highlighting information from the presentation she did with OFGA members at the end of April. If you had not yet looked at OFGA's upcoming micro-tours you can check them out in this issue.

If there is topic you would like to see us cover in Just Picked! let me know. I am always looking for good information and research to share. Hope to see you at an OFGA micro-farm tour this summer or fall.

Amy Bacigalupo

Understory Groundcover Q & A

with Annie Klodd of UMN Extension

Amy: *What is an understory groundcover and why should fruit farmers think about it?*

Annie: Understory groundcovers are crops that growers plant between trees within the row. I love talking about them because they have so many benefits like weed suppression, attracting beneficial insects, stopping erosion and helping to retain nitrogen.

I think choosing dense, low growing species like fine fescue grasses (picture A) provide the best weed suppression and are an

attractive ‘no-mow’ option for fruit growers. Mixing in other species like clovers or other forbs with the grasses can help add other benefits.

Amy: *What understory groundcover do you think is the most effective for soil health and weed suppression in the upper Midwest?*

Annie: A 16-year study by Cornell found that bark mulch contributed more nitrogen to the soil than grass or herbicide treatments. Grass and herbicide are comparable in terms of the amount of nitrogen they contribute to the soil. Grassroots are very efficient at taking up and recycling nitrogen which means that there is not a lot left for tree roots. This same study also found that areas treated with bark mulch had higher organic matter compared to the herbicide and grass treated areas along with a 10-fold increase in phosphorous. Research I did as a graduate student on nutrient and water competition with cover crops in vineyards showed that fescue grasses may suppress weeds very well.



I recommend a low, less than 1-foot tall, dense grass along with a low-lying forb (broadleaf flowering species). This ‘no mow’ option can significantly reduce your time out mowing while providing weed suppression and building health soil. Fescue grasses are a good choice and you can include perennial clovers or allow the natural vegetation to grow along with the grasses. Select species with a dense canopy if your goal is weed control. For example, bunching grasses and fine fescues are low growing, easy and cheap to source and fast to establish. Grasses are perennial so you don’t need to cultivate annually. I specifically recommend fine fescue species because they are no-mow and drought tolerant including creeping red fescue, chewing fescue, hard fescue and sheep’s fescue.

Atuche et al. 2011. Long-term effects of four groundcover management systems in an apple orchard. *HortScience* 46(8)

Klodd et al. 2016 Coping with cover crop competition in mature grapevines. *Plant and Soil* 400: 391-402

Amy: *What does the research say about choosing understory groundcovers for fruit crops?*

Annie: Cover crop roots compete for water, space and nutrients with the roots for your trees. This can have a significant negative impact in the first years while the trees are getting established. Later, after the tree’s roots have grown deeper to get below the cover crop roots the impact on yield becomes much less. Woodchip mulch can increase organic matter, nitrogen and phosphorus while providing good weed suppression but will become very weedy over time. Using groundcovers for weed management is a good idea but you need to account for the impact on the soil and tree establishment.

When making a decision about adding flowering plants to your orchard consider the impact of the use of insecticides, including those approved for use in organic systems. Some OMRI-approved insecticides are highly toxic to bees. Because of this risk, pollinator experts advise against main-



taining flowering species in the orchard, or mowing the flowers off before spraying insecticides. A safer practice is to plant pollinator plants on the outskirts or the orchard – bee researchers say that the bees will find them just fine along the perimeter.

Amy: *What do you recommend for groundcover establishment with newly planted trees?*

Annie: Long-term studies have consistently shown that in-row covers slow the growth of new trees and cause yield delay. This is also true for weeds. I advise planting covers after Year 5 of a tree establishment in the orchard. For Year 0 – 5 use wood chips, shallow cultivation, flaming or landscape fabric.

If you are planting an in-row cover crop in Year 1, increase your fertilizer and water to compensate for competition below ground. When planting no-mow grasses, it is best to lightly cultivate the seeds in, which will increase the germination rate. These grasses can be overseeded with annual forbs if you want to add diversity

Pollinator Research Opportunity with UW Madison

Colleen Satyshur, Outreach Coordinator

Did you know that there are over 20,000 species of bees on Earth? In the upper Midwest, we have about 500 species. How many can you find in a survey today? Wild bees have emerged, ready to pollinate early blooming crops and flowers. The Gratton Lab at the University of Wisconsin-Madison has developed a new smartphone app called WiBee for growers, gardeners, and community scientists to help survey wild bees. The goal is to collect enough data to be able to make recommendations on pollination management at a local scale. The app can also be used in home gardens, or at prairies, parks, woodlands, or anywhere else there is pollinator activity, whether or not you live in Wisconsin. All are welcome to contribute.

You can participate. The WiBee app relies on short 5-minute counts of flower visits, with pollinators grouped into just a few easy to distinguish categories. The process is designed to be quick and straightforward for our participants. Once the app is downloaded, surveys can be done without wifi. Participants can also track wild bees at their locations on the “results” part of the app. Ap-
ples: For those of you who still have bloom (Northern WI or Door County?), please send in some surveys. We also plan to calculate the variability of bee counts and to do that we need places with multiple surveys. Cranberries, Blueberries, Strawberries and more will be blooming soon if not already. Now is a good time to set up the app. **Wisconsin growers** who complete 9 surveys (3 surveys a day for 3 days during bloom for a total of 45 minutes of survey time) are eligible to receive a \$50 honorarium. Visit www.pollinators.wisc.edu/wibee to learn more about the project.

Download WiBee: The Wisconsin Wild Bee App on your smartphone to get started. Have a question? Email us at pollinators@wisc.edu

More Pollinator Research Opportunities with UW Madison

Dr. Hannah Gaines Day

Do you grow a pollinator-dependent crop in Wisconsin?

[PLEASE TAKE OUR QUICK GROWER SURVEY!](#)

The University of Wisconsin-Madison is conducting a survey of growers as part of a larger study examining the use of managed bees for crop pollination across the state. This study is being conducted to understand where in the state crops may be most vulnerable to changes in honey bee availability. Your participation will help us gain a better understanding of where in the state honey bees are used for crop pollination (and where they're not). Participation is voluntary and will take **less than 5 minutes**. All information collected in this survey will be kept confidential. If you have questions about this study, please contact Dr. Hannah Gaines Day (hgaines@wisc.edu).

To complete the survey, please visit this link: <https://go.wisc.edu/hc677v>

OFGA Micro Farm Tour 2021 Schedule

OFGA is offering excellent micro-farm tours from June through November this year. We are keeping numbers small to ensure everyone's safety. Information for all four tours can be found at OFGA's Upcoming Events page on the website. Be sure to save the date. Registration for each tour will open 30 days prior to the date of the tour. If you have questions or would prefer to register through email you are welcome to contact Amy Bacigalupo at ofgacoordinator@gmail.com. OFGA members attend for free. If you are not yet a member you can take advantage of our new member discount. Join now on OFGA's Member page on the website.

Registration is now open for.....

Saturday, June 19th near Antigo, WI



Converting to Organic and Regenerative Fruit Production

Join Lisa Reittinger to learn more about converting from conventional fruit production to organic/regenerative. Grandview Orchard and Nursery is a U-pick and farmstore featuring 30 varieties of apples near Antigo, WI. Lisa will share her expertise and experiences with understory management, sap analysis and disease management as well as marketing logistics for on-farm sales.

Saturday, August 14th, 1 - 4 pm near Montevideo, MN



Growing Organic Apples & Pears Part-time and Low-Cost

with Amy Bacigalupo and Paul Wymar of Kalliroe Orchard

Join Amy Bacigalupo and Paul Wymar to learn about establishing a small-scale, low cost organic apple and pear orchard. In addition to orchard management this tour will also focus on low cost strategies for post harvest handling and storage.

Thursday, September 9th near Duluth, MN

Fruit Production and Marketing near the North Shore

with Deb Shubat of Shubat Fruits

Shubat Fruits is a diversified farm with both perennial and annual crops. Deb markets her fruits, flowers, trees and transplants at the Duluth Farmers Market from May through October. This is a great opportunity to learn from an experienced fruit grower who has figured out fruit production and marketing in Zone 4.



Friday, November 5th near Madelia, MN



Farm-Crafted Hard Cider Production

with John Knisley of Tallgrass Cider and Alternative Roots Farm

Alternative Roots/Tallgrass Cider is an organic orchard and farm-crafted hard cider business. John will share information about the start-up expectations and costs for a cidery as well as tracking apples from the orchard to the glass.

About OFGA



The Organic Fruit Growers Association is a not-for-profit organization formed exclusively for charitable, scientific and education purposes. We share information and encourage research to improve organic production and marketing of fruit and represent the interests of organic fruit growers.

For more information, contact coordinator Amy Bacigalupo at ofgacoordinator@gmail.com

Visit OFGA on our website at <https://www.organicfruitgrowers.org/>

Or on Facebook at <https://www.facebook.com/organicfruitgrowers>