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Winter Damage in Northern Wisconsin

By Lee Daniels

When I first volunteered for writing this article, I thought I had a good general answer for all the winter damage we are seeing in Northern Wisconsin marshes this year, based on initial observations. After scouting cranberries for seventeen plus years, I should have known better than thinking this. When it comes to winter damage there usually is no good general answer for when it occurs. What worked for one marsh didn't work for another.

At first, I thought that the marshes that had better luck making good ice early fared better than those that had trouble making good ice later on, due to slush and snow. When I checked further, I found this wasn't always the case. This killed that theory, but since Allison was expecting an article from me on this subject, I thought I should give my two cents worth.

Yes, I think slushy snow and poor ice did contribute to the problem in some cases, but it was just one of the many factors that came in to play. Some of the Winter Damage (orange vines) we see is from cold dry winds on frozen beds before or after the winter flood. Some of it is the standard leaf drop that we regularly see on edges of beds when water stands too long. The bulk of the damage is the large areas of brown vines and leaf drop and/or lots of side-shooting, with low numbers of fruiting uprights. What caused the damage in these areas is the question we are all trying to figure out.

A number of growers have said that the vines didn't quite look as dormant as they should when winter set in. This could very well be a major contributing factor. The warmer than normal late autumns we



Spotty winter damage and surviving vines in Northern Wisconsin

have had the past few years prior to winter has caused problems for many of our perennial crops in Northern Wisconsin.

We can't control the weather. Therefore, as Amaya Atucha pointed out in her May 27, 2020 CCMJ Video Interview, we should try to reduce other stress on vines, to help them handle adverse weather conditions better. Ways to reduce stress on vines include:

- Maintain or improve bed drainage. This will not only make the cranberries and their roots healthier, but will help get the water off quicker when pulling a flood.
- Fertilize at the proper time. See Amaya Atucha's excellent article "Fertilization Recommendations for This Season" that was in last year's CCMJ Volume 32, Issue 4. Current recommendations are to not start applying fertilizer until fruit set. Applying fertilizer earlier can cause over growth of vines, which in turn puts more stress on vines for overwintering.
- On edges of beds, or beds, that have little or no crop this year, cut way back on fertilizer. I know that these areas look tough, so the tendency is to give them extra fertilizer; but remember they are not producing a crop. Therefore, they do not need the normal amounts of fertilizer. Your goal is to just get them grown back for next year. Extra fertilizer, especially late Nitrogen, can set them up for excessive growth and the same problems again next year, due to delayed dormancy, etc.
- When vines are not being protected by sprinkler system or winter ice, and you are not sure on forecast for cold temperatures, or cold drying winds, I always recommend, that when in doubt go with the temporary flood; since once damage has occurred it is too late to go back.
- When flooding for harvest, cold temperatures, and/or cold dry winds only hold water for as long as need to, since if water is held too long it can reduce dormancy of vines.
- Try to stick to a regular sanding schedule when possible. Again, healthier vines and roots can handle winter stress better.
- Keep good records. They can be helpful when diagnosing problems, or planning for future years.

In summary, there is no easy "Cookie Cutter" solution to the winter damage problem. Also, what worked at one marsh may or may not have worked at another. I can only recommend that if you are a grower that had significant winter damage that you look back at last year, and try to remember if any thing stands out that could have put more stress on vines. Something may or may not stand out.

Update from the Wisconsin Cranberry Research Station

By Wade Brockman

Today we're getting a new trial from Jed Colquhoun running, testing the efficacy of different applications on stimulating new growth.



Introducing Dr. Leslie Holland, Our Incoming Assistant Professor and Extension Specialist in Fruit Pathology

By Leslie Holland

Leslie Holland holds a PhD in Plant Pathology from the University of California, Davis, and has over six years of experience studying fungal canker pathogens of perennial fruit crops.

She graduated with a Master's degree in Plant Pathology from Washington State University and earned her Bachelor's degree in Biology at New Mexico State University. Despite completing her college education out west, she is an Ohio native and is excited to be back in the Midwest. Holland enjoys cooking, hiking, fitness, and teaching her puppy, Clyde, new tricks!

She is very excited to join the department of Plant Pathology and the UW Fruit Team this August, and eager to serve as a researcher, educator, and advocate for students, fruit growers, and supporting industries in Wisconsin.



WiBee: The Wisconsin Wild Bee App

By Katy Thostenson

Are you interested in learning about and collecting data on the bee community pollinating cranberry blooms on your farm? The Gratton Lab at the University of Wisconsin-Madison has a new smartphone app for growers to help collect data on wild bee pollination. The abundance and diversity of wild bee communities varies from farm-to-farm, making local data necessary for understanding the abundance and contribution of local pollinators. Our research team cannot visit every farm at once, so we designed a smartphone app tool and are inviting growers to help us study wild bee pollination by completing a series of 5-minute bee surveys during cranberry bloom.

Interested growers can download WiBee: The Wisconsin Wild Bee App on their smartphone from the App Store or the Google Play Store. Once you begin completing bee surveys, you can also explore your own data within the app and track changes in pollinator activity over time. As a thank you for your participation this year, we're also offering a \$50 incentive to Wisconsin growers who complete a series of bee surveys. Thank you for your help collecting this important data on our wild pollinators! Learn more about the project at www.pollinators.wisc.edu/wibee and connect with us at pollinators@wisc.edu with any questions or feedback.

Grower Updates

Flying Dollar Cranberry

By Seth Rice

Here at Flying Dollar we are getting into more and more seat time in our tractors with the boom. It does not matter if we're fertilizing or spraying it's always a beautiful day on the marsh. We have also got the mowers out and started to get the place looking great again.

Every now and then, we see a baby fawn again pop up and give us a "what are you doing here look". Also we are starting to see blossoms on our early varieties. We will see the bees soon!

Gardner Cranberry

By Willow Eastling

Wow! A lot has changed since we last chatted! On average, we are seeing scattered bloom across the majority of our marshes with our advanced beds hitting 10% this week, 6/15. We received our bumblebees the week of 6/8 and will get shipments of honeybees starting the week of 6/15. The properties that do fungicides will do their first app the week of 6/15 in the central area and most likely the following week for the northern marshes.

Some of our properties that flooded up early May for frost had slightly lower pest pressure but then we also had some pressure that was higher than previous years, despite the flooding. The most recent frost event was 6/13 for all regions, as of 6/15.

With all this chaos in the world today, it sure is a blessing to be in the middle of a marsh, surrounded by hot pink pods that you can almost hear pop open and the sounds of wildlife in the background. When I do hop in the truck, the scenery is almost as peaceful. It brings me to that one song, "Where Corn Don't Grow". I hope everyone is off to a great growing season!

