



# Cranberry Crop Management Journal

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## OBSERVATIONS FROM THE FIELD

by Pam Verhulst  
Lady Bug IPM, LLC

Ready or not, the 2019 growing season has started! We spent the first couple weeks in May organizing IPM supplies, setting White Grub traps and making a few spot checks.

The dormant color is slowly leaving the vines. The Warrens/Tomah area is a little ahead of the Cranmoor area in coloring up. The photos (Image 1) were taken of Stevens (ST) vines 2 days apart. Neither grower protected during the cold snap, which happened the end of April. You can see a huge color difference yet, the buds are both tight.



**Image 1:** *Left:* ST Vines Tomah, WI 5-1-19  
*Right:* ST Vines Cranmoor, WI 4-29-19

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**Image 2:**  
*Left:* Grass emerging above the vines.  
*Right:* Sphagnum Moss greening up.  
5-1-19 Tomah, WI

Herbicides are being applied in between rainfall and frost watch. In addition to pre-emergent herbicide applications, Sphagnum moss and grasses were being addressed the last week of April through the first couple weeks of May. (Image 2)

Nutrient Management Plans have been updated and growers that plan on planting or use soil amendments are collecting pre-plant or spring soil samples these first few weeks of May.

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# PROMOTING WILD BEES ON YOUR MARSH: ESTABLISHING AND MAINTAINING POLLINATOR-FRIENDLY GARDENS

by Christelle Guédot and Nolan Amon  
UW-Madison, Department of Entomology

In the last 5 years, the Guédot lab has worked extensively on providing research and extension resources for cranberry growers on how to protect pollinators and improve pollination in cranberry production. We developed a publication (see photo to right) that covers many pollination topics from what plants to establish for feeding and nesting resources for bees to which pesticides are the least likely to cause harm to bees (Extension Publication [A4155](#) and factsheet [XFrT1001](#)).

A current research project in our lab is to look at the impact of pollinator gardens on bee diversity, bee abundance, and how these may translate into improving cranberry yield. We worked with cranberry growers and Prairie Nursery (a local native plant and seed company) to develop a seed mix that contains native seeds for medium soils, specific for the Great Lakes region and tailored for Wisconsin cranberry marshes.

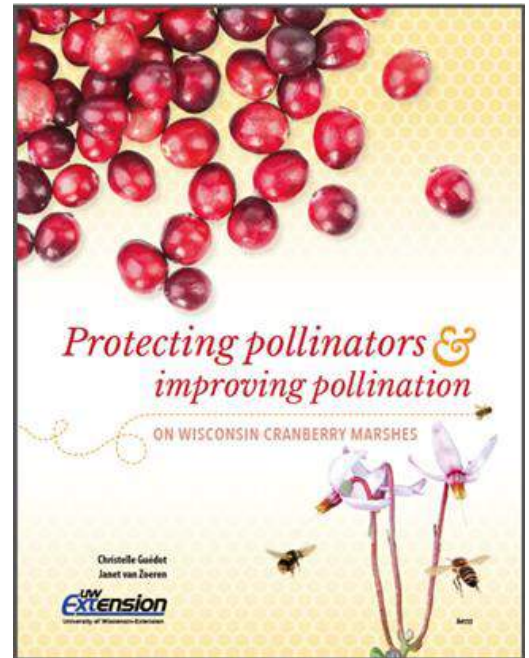
## The seed mix contains:

### Native prairie tallgrasses

- Little bluestem
- sideoats grama
- prairie dropseed
- Canada wild rye

### Native, perennial wildflowers

- Lavender hyssop
- nodding onion
- red milkweed
- partridge pea
- senna
- lanceleaf coreopsis
- rattlesnake master
- blazingstars
- bergamot
- penstemon
- prairie clover
- black-eyed susans
- spiderwort
- blue vervain
- Ironweed
- coneflowers
- golden Alexanders



Monarch butterfly on blazing star. Photo by Brad Wennen, Aldo Leopold Nature Center

The recommendations on how to establish and maintain a pollinator garden (below) are adapted from the Prairie Seeding Instructions from Prairie Nursery.

## Establishing a pollinator garden on your marsh.

Planting a pollinator garden on your farm is a long-term investment and requires a fair amount of planning.



Honey bees on milkweed

*Continued on page 3*



### *Site preparation.*

Once you have selected the site where you plan to plant your garden, it is important to prepare the site at least one year prior to planting to remove weeds present. You should mow, rake or burn the existing vegetation in late fall or early spring. You can then either cultivate or apply an herbicide on the site to kill the weeds. Cultivation should be done at a depth of 4-5" every 2-3 weeks from spring through fall. Alternatively, glyphosate can be applied three times every 6-8 weeks during the season when plants are green and growing. It is essential to remove all perennial weeds prior to seeding your garden and this may take a second growing season to prepare the site if you have high weed pressure at your site.

### *Seeding the site.*

Seeds should be planted in late fall or early spring depending on your type of soil.

Fall seeding will allow plants to naturally break dormancy, will not require watering, but you will not have an opportunity to apply a broad-spectrum weed control in early spring. Fall seeding is recommended for sandy soils, clay and wet soils.

Early spring seeding does not require much watering and is not recommended for heavy soils (due to spring rains).

Seeding can be done by hand (< 1 acre) or using a mechanical planter (>1 acre).

If hand seeding, you would want to seed on dry soil. Mix the seed mixture with a carrier and moisten the carrier/seed mix. Split the mix in half, hand broadcast the first half walking North to South along the planting, then hand broadcast the second half walking perpendicularly to ensure even coverage.

If seeding mechanically, use a broadcast or no-till planter. Tilling is not recommended as it may expose more weed seeds.

### **Maintaining a pollinator garden on your marsh.**

Prairie plants grow slowly and spend energy early on growing their root system. Thus, it is essential to keep weeds in check to allow prairie plants to establish properly and not be outcompeted by weeds.

#### *Year 1.*

The entire planting should be mowed about every month in year 1 as plants that are taller than 12" are likely weeds at this point in time. Make sure to mow before weeds set seeds. You may mow with a string trimmer, a weed eater, flail mower, sickle bar or rotary mower. Weeds should not be pulled as this may disturb and damage prairie seedlings. At the end of the first growing season, leave the dead vegetation standing as it will catch snow, which should help insulate seedlings and reduce frost heaving.

#### *Year 2.*

In mid-spring of year 2, mow plants down as close to the ground as possible and rake off cuttings. Aim to mow between April 1 and May 15 about the time when you would mow your grass for the first time in the spring. Raking off cuttings will help warm soil and encourage prairie seeds to break dormancy. If biennial weeds appear (e.g., sweet clover, burdock, Queen Anne's lace), mow again when weeds are approximately 12" tall and in full bloom but before they set seeds (around June). Do not mow once new plant growth has reached 1ft tall.

#### *Year 3 and beyond.*

This is the year where you may burn your prairie planting to control weeds. If you decide to burn, plan to only burn half of the planting each year. This will help protect eggs and larvae of beneficial insects (pollinators and natural enemies) and helps to avoid grasses becoming too dominant in your planting. If you do not feel comfortable or are not able to burn your planting, you may mow instead, but be aware that mowing is only ~60% as effective as burning for weed control. If mowing, make sure to mow down to ground. Whether you burn or mow, this should be done in mid spring (around April 15 to May 1). Do not burn or mow after new plant growth has reached 1ft tall as you could damage plants and disturb ground nesting birds.

**Happy growing season!**

# GROWER UPDATES

## GARDNER CRANBERRY

Hello everyone! Happy Spring! I think we are all appreciative of the green grass, finally!

My name is Willow Eastling and I work for Gardner Cranberry! I work alongside managers coordinating all of our properties as well as perform IPM.

Gardner's home base is located in Pittsville, WI but we have properties in many different areas across WI. These areas range from Douglas County to Adams County. This makes for a very unique operation, as each property has a different time frame due to location, growing degree days and weather patterns.

I look forward to sharing with you a comparison of the different locations as the growing season takes off!

**Willow Eastling**

## RUSSELL REZIN & SON INC.

Hello and happy spring! I am Amber Bristow, 5th generation cranberry grower from Russell Rezin & Son Inc., in Warrens. After, what seemed to be the longest winter ever, we are excited to finally see some green taking over the marsh.

Like many growers in our area, we were able to hook up our irrigation pipe in early April. It took a few weeks, but I think we have all the kinks worked out with bad gaskets and sprinklers- which makes frost watch much less dramatic!

In between all the rain and windy days, we were able to apply Casoron this week and have been busy planning out the next steps in our nutrient management program.

In the next few weeks, we are hoping to get some drain tile into our new renovations and get the vines back in the ground. We are happy to see all the wildlife slowly emerging and are eagerly awaiting the warm days ahead.

Happy growing season!

**Amber Bristow**

## WISCONSIN CRANBERRY RESEARCH STATION UPDATE

Things at the cranberry station are moving fast with getting our Casoron on last week to the start of frost protecting.

On the renovation side, we are still moving dirt with the hopes of getting drain tile put in the next few weeks.

Some of the UW-Madison staff have been out flagging beds and starting other studies. Hopefully it warms up soon!

**Wade Brockman**



References to products in this publication are for your convenience and are not an endorsement of one product over similar products. You are responsible for using pesticides according to the manufacturer's current label directions. Follow directions exactly to protect the environment and people from pesticide exposure. Failure to do so violates the law.

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