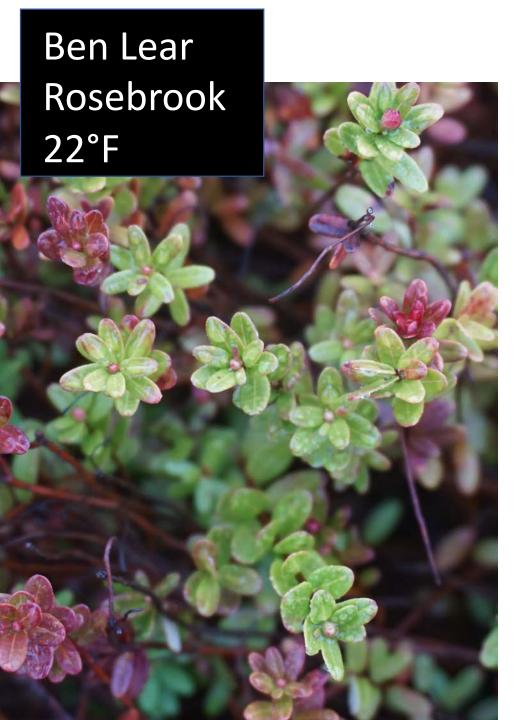
## April 23, 2019

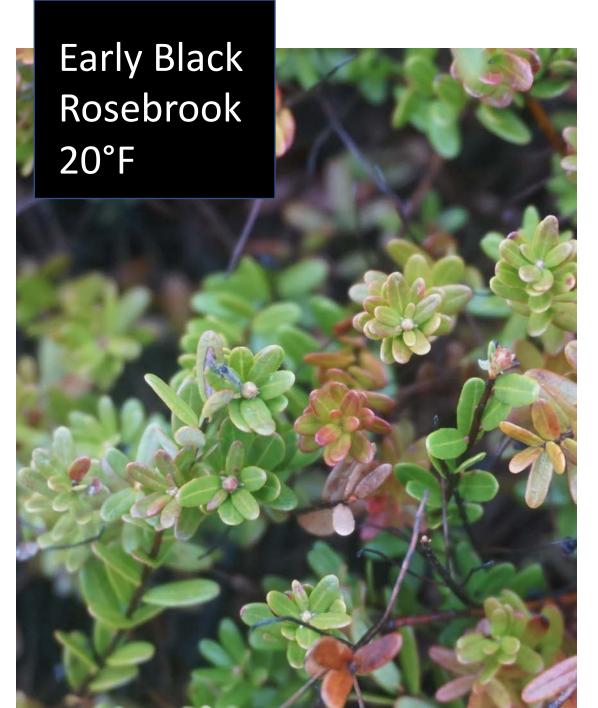
- ALWAYS check the tolerance at your bog. A fact sheet showing all spring tolerances is available in the fact sheet section of the Cranberry Station website. Hard copies are available at CCCGA and at the Station.
- At Rosebrook Bog, Ben Lear, Stevens, Early Black, and Howes are at White Bud Stage based on appearance. At State Bog, stages for those varieties were similar. New cultivars were similar in appearance to Ben Lear.
- The buds are at the White Bud Stage through visual assessment (at this stage also the Dee prediction model >100 GDD).
- At the White Bud Stage, the buds have lost their dormant red color and appear noticeably white or green, bud scales remain tight.
- White Bud Stage tolerances are 20°F or lower for Early Black; 22°F or lower for Ben Lear and new hybrids.
- On-bog photos by Erika Saalau Rojas; close-ups by Krystal DeMoranville.
- Next check is scheduled for April 30<sup>th</sup>

## Degree Day Models

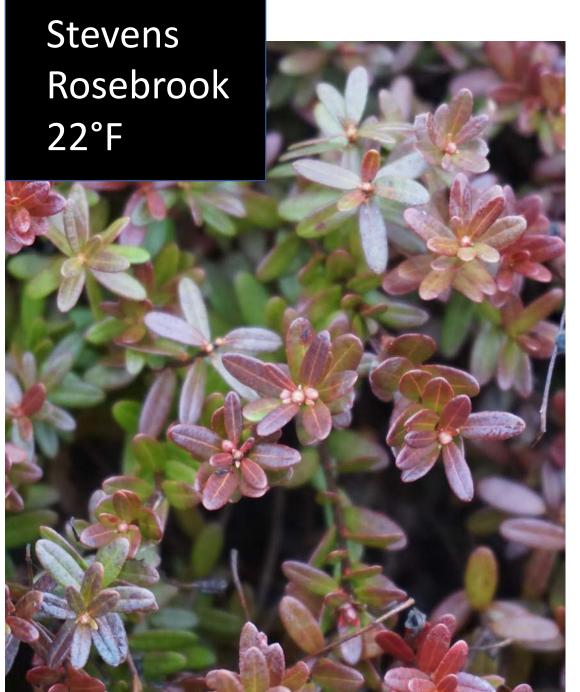
- This spring we are looking at degree day models for when the buds break dormancy and thus should be protected from cold temperatures. In other words, we were hoping to use these models to determine when to begin the spring frost protection season.
- There are 3 models. The 'Dee model' developed for MA conditions predicted that in 2019 the 20°F tolerance on Early Black and Howes was reached on April 21. The 2 other models (from WI) were predicted to reach their trigger (start to protect for 23°F) on about that same date. These outcomes are in rough agreement with what we saw in the field on April 23<sup>rd</sup>.
- Note: in WI they protect beds for 23°F around the White Bud Stage, while in MA we protect that stage for 20°F.



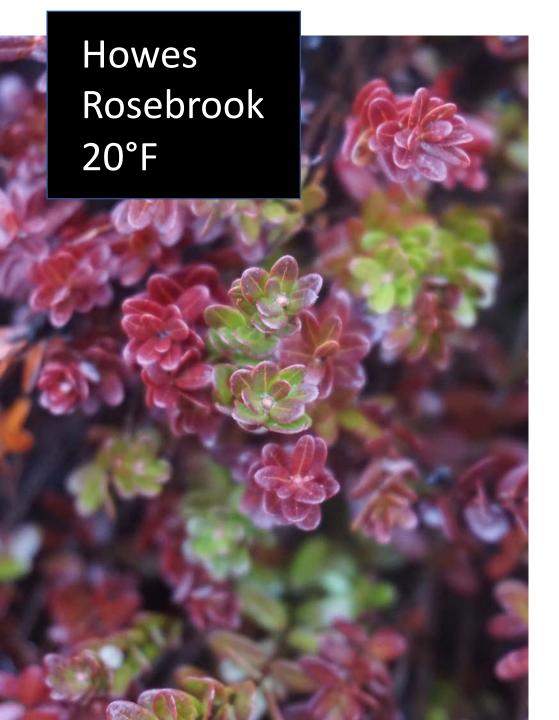








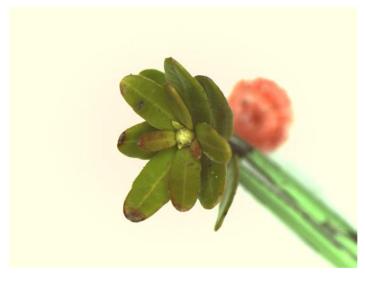






## Additional bud photos April 23, 2019 All from State Bog.

Early Black 20°F



Howes 20°F



Stevens 22°F



Ben Lear 22°F



Crimson Queen 22°F



Demoranville 22°F



Mullica Queen 22°F

