



News from ADS!

For several years American Dahlia Society guru Steve Nowotarski was largely responsible for creating the Dahlia Newsletter. After his untimely passing the newsletter became an orphan for a time. Because we are a totally volunteer organization, our productive resources are limited. Nevertheless, the leadership of the ADS believes this is an important communication and you all are a part of the dahlia family.

Our principal effort is to produce for our members The ADS Bulletin on a quarterly basis. Accordingly, we decided to change the format from a newsletter to a periodic communication that will contain practical information for the gardener who grows dahlia. This is who we think you are.

Because this is spring, we ask, "when can I plant my dahlias." The normal reply is "after there is no danger of frost, and the soil is no longer cold and soggy." We recently received an internet communication from Second Sun Hydroponics, that provides more specific information including a link to frost dates by zip code. We thought you would find it of interest for frost and wet-soil sensitive plants like dahlias, tomatoes and basil. Second Sun generously has permitted us to share the article with you.

I hope you like this new format. You will not hurt our feelings, very much, if you unsubscribe.

Happy Dahlias,
Harry Risetto

Excerpt from Second Sun Hydroponics ...

Spring is Here!

Season Extension

It's perhaps the best time of the year, spring! We hope that many of you have had the chance to get your plants started so that you can take advantage of the (perhaps) early spring. However, don't be fooled by this nice weather: for most of us north of the Mason-Dixon line, [the first safe planting date](#) is still at least a month away. So while we enjoy the 80F days, know that a cold snap can be just one rogue weather system away.

But what if you want to press your luck and have watermelons on July 4th? Certainly, there can be some rewards to getting plants out early, especially if we don't get said cold snap, though there are some things to consider. Here are some ways you can best Mother Nature.



Soil Temperature

While the air temperature is warm, night time temperatures are still dipping into the 30's or 40's. As a general rule, ground temps tend to rest around the overnight temperature. For some crops like peas, radishes, cabbage, kale, etc. this isn't a problem. They like the cooler soil (peas prefer it). But for many of our favorite vegetables--here's looking at you sweet corn and green beans--soil temps need to be rather warm for optimal germination and plant growth. Cold soil will lead to issues with these plants including seeds simply rotting away before they germinate.

However, we can combat cold soil temperatures with a few tricks. The first is to use a plastic mulch. When applied to the garden soil, it will raise soil temperatures significantly by holding daytime heat. You can use regular black utility film stretched over your garden beds with holes cut in it to act as a mulch (clear film will let sunlight touch the soil which means weeds, so we don't recommend this for most home growers). The pictures should provide some ideas on the optimal width for these beds.



Early season sweet corn growers will often use a clear plastic that is stretched between a soil mound on each side of the row. When the corn pops up, it's in a mini greenhouse. When it touches the film, the grower will slice it down the center to let the corn grow up. Tomatoes benefit from growing on red color plastic, while cucumbers can benefit from green and blue. If you want to read more about the interesting science behind plasticulture, check out the [Penn State website](#). You could experiment with other mulch types in the garden, including perhaps wood chips, burlap, or cardboard.



Air Temperature

So you've got the ground temps covered, but what about the air temperature? This part is a bit harder. While ground will tend to hold heat, air will cool rapidly, even when trapped in a structure like a high tunnel or greenhouse. High tunnels are one choice. They are an excellent season extension technique with the benefit of warming soil and air in the early season (even March days can exceed 120F if you don't vent the tunnel), and helping to keep the days warmer late in the season as well. For the best results, a high tunnel needs an overnight heat source or a secondary barrier to heat loss. The heat source you can imagine, but what about the secondary barrier?



Whether outside or in a tunnel, floating fabric covers will provide the best heat retention, especially when combined with plastic mulch. Some growers will even use multiple layers of fabric to achieve greater insulation value. At home, you can use old sheets or tablecloths as a cheap alternative (check the thrift store). Generally, fabric covers will buy you a few degrees or more in a high tunnel, and offer almost no protection outside at all if the wind is howling. While this passive technique can help keep air temperatures above freezing, it's not foolproof, so you must weigh the risk of extreme cold and losing your crop against the benefit of having tomatoes in June. A heat source is the only sure way to prevent freeze injury.

Here are some pictures of things we tried over the years, most of which worked pretty well. However, these plants were set out just 2 weeks before the last frost date. One year (2009) had a freeze on May 17, which is after the last frost date. We used sheets to protect sensitive plants, and while we had some damage, they did survive.





Here's a great set of images to illustrate the benefit of using plastic mulch. Both pictures have seed that went in the ground at the same time, but the second photo the seeds were planted into soil under plastic mulch. You can see how much faster the seeds germinate when they're under the plastic due to the warmer soil. Plus, weeds are a lot easier to manage!





American Dahlia Society | www.dahlia.org

