

As you begin the process of overwintering your Endless Summer<sup>®</sup> Hydrangeas, use this guide as reference. It is intended to provide a basic framework of overwintering practices that we use at Bailey Nurseries for rooted plug liners and container-grown Endless Summer<sup>®</sup> varieties. Please keep in mind these cultural practices have worked for us, but results and methods will vary based on your climate, facility, and growing conditions.

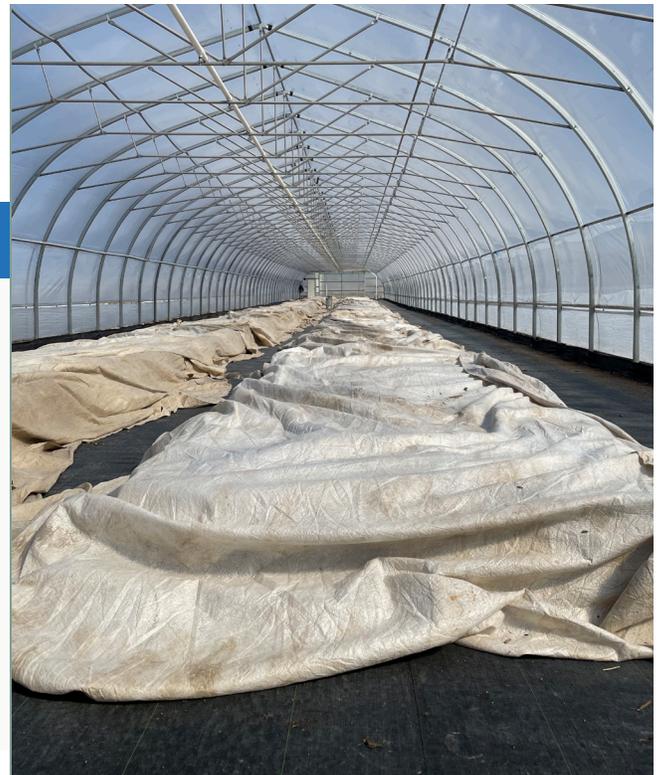
It is important to protect plants from early and late frosts as temperatures cool down in the winter and warm up in the spring. To prevent die back, take preventative steps to protect uncovered plants when temperatures drop below 30° F.

▶ Plug liners should be overwintered in a greenhouse where air temperature is kept between 28 and 33°F. Monitor the soil and adjust accordingly to prevent the soil from freezing solid.

**Containers can be overwintered multiple ways. Bailey Nurseries uses the following methods:**

#### **COVERED STRUCTURES:**

- Containerized plants are palletized and stored in large cold frame enclosures or greenhouses. In harsher climates, like our facilities in Minnesota, the pallets of plants are stacked to cube out as much vertical space as possible.
- The structure is then covered in dual-sided black and white poly and heated to keep a minimum temperature of 28° F. The black and white poly provides more consistent and stable temperatures inside the covered structure than all-white poly.



## COVERED STRUCTURES (CONTINUED):

- In warmer climates, plants can be brought into an unheated greenhouse and covered with a frost blanket or frost cloth. This method is used successfully at our Illinois location using two layers of 4-ounce non-woven fabric. We only recommend this overwintering practice if temperatures under the blanket stay safely at or above 22° F. If long durations of cold occur where temperatures are close to 22° F under the fabric, another layer of fabric should be applied until outside temperatures rebound.
- The benefits of using fabric: the blanket keeps the temperatures more consistent; the darkness under the blanket helps keep the plants dormant; and the moisture stays locked in for the plants.
- At our Illinois facilities, the blanket is removed in early March to help keep plants dormant until they naturally wake up with warming temperatures. In general, we remove the blanket after temperatures have been consistently in the 50s in the greenhouses with doors shut. We have also opened doors and left the blankets on to cool the inside of the houses in late February and early March with very good success in more mild years.

▶ Containerized plants are tipped and covered with poly. Generally, this process occurs in late October or early November just prior to a hard freeze. In warmer climates, follow the single-layer poly method. In harsher climates, we suggest the double-layer poly method, which we use in our Minnesota container fields.

## OUTDOORS:

- **Single-layer poly method:**

Plants are tipped and covered with a layer of 3 mil or 5 mil poly, followed by a 3" layer of Sudan grass for insulation. This keeps the plants in a temperature range of 22-32° F.

- **Double-layer poly method:**

Plants are tipped and covered with a layer of 3 mil or 5 mil poly, 3" of Sudan grass, followed by another layer of poly and 3" of Sudan grass. This double-layer method provides additional insulation and minimal temperature fluctuations, keeping the plants at roughly 28-32° F. The slight temperature fluctuation is simply based on the amount of snow cover and duration of outside temperatures.



The listed recommendations are based on methods used at Bailey Nurseries facilities. Results may vary depending upon your location and environmental circumstances.