

Weather Records

Compiled by COUNTRY WHAT NOT GARDENS, <http://www.coldhardybamboo.com>
 This is a compilation of the most severe winter weather that lead to top kill.
 This is not an all inclusive year round weather data compilation.

Non-threatening weather.

Extended periods where water cannot be taken up. [1]

Consecutive hours below freezing. [2]

Coldest day of the year.

Moisture recovery period. [3]

- 1 – Extended periods where water cannot be taken up due to deep frozen soil leads to dehydration.
- 2 – If periods of consecutive freeze hours aren't followed by enough warmth for the soil to thaw, further dehydration will persist despite warmth above freezing.
- 3 – Moisture recovery periods following extreme cold or prolonged periods below freezing are important to allow the soil to thaw enough for the plant to be able to take up moisture into the culms and foliage.

DATE	TEMP High / Low	WIND Max Speed	PRECIP Water / Snow	Snow Depth	HUMIDITY During Strongest Winds	HRS < 32°F	TOP KILLED	NOT TOP KILLED
Winter 2018 / 2019								
1/1/2019	41°F / 31°F	18mph	T/T	0"	93%	15 hrs		
1/2/2019	31°F / 28°F	22mph	T/T	0"	82%	24 hrs		
1/3/2019	37°F / 23°F	18mph	0" / 0"	0"	78%	14 hrs		
1/4/2019	49°F / 26°F	15mph	0" / 0"	0"	85%	9 hrs		
1/5/2019	50°F / 24°F	16mph	0" / 0"	0"	76%	9 hrs		
1/6/2019	41°F / 26°F	24mph	0" / 0"	0"	70%	5 hrs		
1/7/2019	54°F / 34°F	29mph	0.06" / 0"	0"	78%	0 hrs		
1/8/2019	46°F / 32°F	28mph	0.01" / 0"	0"	55%	0 hrs		
1/9/2019	31°F / 19°F	29mph	0.05" / 2.7"	0"	75%	24 hrs		
1/10/2019	27°F / 20°F	17mph	T/T	2"	75%	24 hrs		
1/11/2019	27°F / 25°F	13mph	0" / 0"	1"	75%	24 hrs		
1/12/2019	28°F / 26°F	17mph	0.26" / 2.9"	0"	81%	24 hrs		
1/13/2019	30°F / 11°F	16mph	T/T	3"	75%	24 hrs		
1/14/2019	28°F / 7°F	13mph	0" / 0"	2"	84%	24 hrs		

1/15/2019	28°F / 20°F	24mph	T/T	2"	81%	24 hrs		
1/16/2019	32°F / 20°F	16mph	0.01" / 0.1"	2"	69%	24 hrs		
1/17/2019	32°F / 24°F	13mph	0.04" / 0.4"	2"	81%	24 hrs		
1/18/2019	32°F / 25°F	15mph	0.01" / 0.6"	2"	84%	24 hrs		
1/19/2019	26°F / 11°F	25mph	0.21" / 2.3"	2"	74%	24 hrs		
1/20/2019	14°F / 1°F	18mph	T/T	4"	70%	24 hrs		
1/21/2019	8°F / -12°F	18mph	0" / 0"	4"	38%	24 hrs		
1/22/2019	33°F / 6°F	22mph	0.17" / T	4"	61%	23 hrs		
335 consecutive hours below freezing from 1-9 through 1-22.								
1/23/2019	41°F / 25°F	21mph	0.29" / 0"	4"	97%	8 hrs		
1/24/2019	26°F / 11°F	26mph	0.02" / 0.8"	4"	81%	24 hrs		
1/25/2019	11°F / -2°F	22mph	0.02" / 0.9"	3"	76%	24 hrs		
1/26/2019	16°F / 7°F	15mph	0.12" / 3.8"	4"	65%	24 hrs		
1/27/2019	15°F / -2°F	17mph	0.03" / 0.9"	6"	84%	24 hrs		
96 consecutive hours below freezing from 1-24 through 1-27								
1/28/2019	34°F / 8°F	23mph	0.46" / 6.7"	7"	85%	21 hrs		
1/29/2019	15°F / -6°F	26mph	0.01" / 1.5"	10"	73%	24 hrs		
1/30/2019	-6°F / -20°F	38mph	T/T	9"	64%	24 hrs	All species to the snow line	
1/31/2019	0°F / -20°F	18mph	0.01" / 0.3"	9"	67%	24 hrs		
2/1/2019	16°F / 0°F	13mph	0.02" / 0.6"	8"	73%	24 hrs		
2/2/2019	41°F / 9°F	20mph	0" / 0"	8"	85%	10 hrs		
127 consecutive hours below freezing from 1-28 through 2-2								
2/3/2019	47°F / 36°F	17mph	0" / 0"	5"	89%	0 hrs		
2/4/2019	50°F / 35°F	21mph	0.11" / 0"	0"	96%	0 hrs		
2/5/2019	36°F / 29°F	25mph	0.14" / 0"	0"	92%	7 hrs		
2/6/2019	38°F / 34°F	16mph	0.32" / 0"	0"	89%	0 hrs		
2/7/2019	53°F / 17°F	32mph	0.32" / T	0"	68%	2 hrs		
2/8/2019	17°F / 8°F	31mph	T/T	0"	59%	24 hrs		

2/9/2019	25°F / 13°F	16mph	T/T	0"	74%	24 hrs		
2/10/2019	28°F / 17°F	17mph	0.11" / 1.5"	0"	61%	24 hrs		

In Conclusion – The rest of the winter was relatively normal to mild. *Arundinaria gigantea* 'Macon' had never top killed since we acquired it in 1998, until the winter of 2018/2019. The combination of severe cold with wind desiccated it. It had taken -20°F before and not top killed. The addition of the wind was too much at those temperatures. All species of bamboo recovered fully during a few weeks in the spring. More severe cold damage was done to Japanese maples, Zelkova, Yews, and Boxwood that will take years to recover.

Winter 2019 / 2020

This winter was mild. The lowest temperature we experienced was 5°F. None of our species top killed.