

Assessing Your Forage Stands for Winter Survival



**The earlier you make a stand assessment ...
the more options you have for remedial action.**

When should I start scouting my fields for winterkill?

- Now is the time when your alfalfa fields start to come out of dormancy.

What causes alfalfa winterkill?

- Frequent freeze-thaw cycles that many fields were exposed to over the past season
- Flooding and ice sheeting prevalent this spring may have starved the alfalfa plant from oxygen and caused heaving.

What are the key ways to assess my forage stands for winter survival?

- Checking if your alfalfa plants are alive (begin as soon as the frost is out of the ground)
 - Dig a few plants 4-6 inches deep and look at tap root
 - If taproot is turgid it is alive and healthy
 - If taproot is browned, dehydrated and ropery it is dead or dying
- Doing stem counts (do this once there is enough growth to count stems, about 4-6 inches). The critical level of 40 stems per square foot or less will result in a 25% yield reduction and should be rotated.²

Age of Stand	Plants/sq. ft.
New Seeding	20+ plants/sq. ft.
Year 1	12-20 plants/sq. ft.
Year 2	8-12 plants/sq. ft.
Year 3 or older	5 plants/sq. ft.

Table 1. Plant Count (# per square foot)¹

Stems per square foot	Maximum Yield
55 or more	100%
40-50	75%-92%
Less than 40	Stand is too weak to keep

Table 2. Stem Count (# per square foot)²

Can I interseed alfalfa back into a stand?

- If an alfalfa stand is more than a year old DO NOT interseed alfalfa back into the stand; this will not work because of autotoxicity. You can however interseed grasses to thicken your stand if you need more forage tonnage.
- If a stand is less than a year old and you want to reseed alfalfa, your best option is to disk the field and reseed with alfalfa immediately, this is the only way to avoid the risk of autotoxicity.

How should I seed my new forage stand?

- Seed a new forage stand in 2019. Direct seeding is the preferred option and seeding into a field that had soybeans last year works well because soybean fields leave a small amount of residue to prepare a seedbed with.
- Consider terminating the field with a thin forage stand and rotate your crops. If a stand is more than a year old, this ground will have enough legume credits to sufficiently grow a crop of grain or silage corn with some starter fertilizer.
- Doing plant counts as soon as plants break dormancy

1. 1 Undersander, D. 2013. Assessing Alfalfa Stand Condition in the Spring. University of Wisconsin.

2. OMAFRA. 2011. Alfalfa Stand Assessment.