



Spring Stand Evaluation Tips

Winter can be very hard on alfalfa. Cold temperatures, ice sheeting, and freeze-thaw conditions can all be damaging to alfalfa stands. When scouting alfalfa stands in the early Spring for signs of winter injury or winterkill, base your decision to keep the field or plow on the following guidelines.

Don't take Spring stand counts too early

In the Spring, walk your alfalfa fields to determine if there are enough plants (or stems) remaining per square foot to produce satisfactory forage yields and to keep weeds from taking over. It is best to wait until the alfalfa is growing vigorously (see photo below) before walking the field. Taking stand counts too early can give a false assessment, because some healthy plants may be slow to break dormancy.

Walk the entire field, for some areas will be better than others. Healthy plants will be vigorous with firm roots and crowns. Winterkilled plants will have soft crowns and roots, little or no top growth, and will be easy to pull out of the ground, because the roots are dead and decaying.

Plants that are injured (i.e. only one or two stems on one side of the crown) should not be counted; they will probably die and will not be productive even if they do survive. Plants that are only slightly injured can be counted as healthy if there are several stems growing from all regions of the crown. If there are many of these slightly injured plants in the field, first harvest should be delayed by 1 to 2 weeks to allow this alfalfa stand more time to recover from winter injury.

Re-seeding decisions depend on age of stand

In Table 1, we see the number of plants per square foot that are needed to deliver profitable production based on the age of the stand. As an alfalfa stand gets older, fewer plants per square foot are needed to give good productivity. The plants that remain in older stands are usually larger (more stems per plant) than in younger stands and will produce similar yields. As an example (from Table 1), 7 plants per square foot is poor in a 1- or 2-year-old stand but is considered good in a 4-year-old stand.

Table 1: Alfalfa Stand Density Recommendations

Age of Stand (years)	Stand Density (plants/sq. ft.)		
	Poor	Marginal	Good
1	<10	10-15	15+
2	<8	8-10	10+
3	<6	6-8	8+
4	<4	4-5	5+

Another method for determining whether or not to replace an alfalfa stand involves counting stems per square foot rather

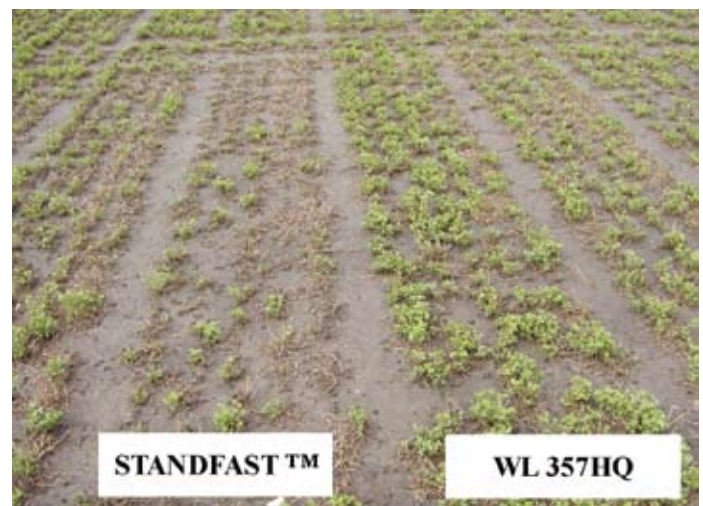
Table 2: Alfalfa Stem Density Recommendations

Stem Density (stems/sq.ft.)	Action
>55	Stems density not limiting yield
40-55	Some yield reduction expected
<39	Consider replacing stand

than plants per square foot. For some, counting stems is easier than counting plants. In Table 2, we see the minimum stems densities recommended for maximum yield and stand retention. Note that the stem count per square foot method is independent of stand age, so this technique can provide accurate assessments even when the grower is uncertain of stand age.

Plow thin, poor stands and harvest valuable nitrogen credits

Winterkilled alfalfa fields should be sprayed out and/or plowed. Re-seeding alfalfa into the same field that same year is usually a bad idea, due to autotoxicity effects on alfalfa seedling establishment and lower yields for the life of the stand. A much better idea is to plant a grain crop (e.g. corn) into the plowed alfalfa and take advantage of the impressive legume nitrogen credits (up to 190 lbs nitrogen/acre) and other proven rotational benefits (see the *Winter 2007 Haymaker*). In a year when nitrogen fertilizer costs have sky-rocketed, growing high-yielding corn with little or no nitrogen fertilizer inputs makes sense. ■



WL 202 – Our First Alfalfa Variety!

In 1962, the Waterman-Loomis Company released their first alfalfa variety, WL 202. This winterhardy alfalfa was a distinct improvement over the public varieties grown at the time (Vernal, Ranger, etc.), but by today's standards WL 202 was nothing to write home about. With a DRI (Disease Resistance Index) of a whopping 12/30, only moderate winterhardiness, slow recovery after cutting, and a preference for the "Holiday" harvest schedule (Memorial Day, Fourth of July, Labor Day), WL 202 looks dated when compared to today's elite alfalfas (e.g. WL 319HQ, WL 357HQ). However, in its day, WL 202 was considered revolutionary: the first private (proprietary) alfalfa to consistently deliver a significant performance



The Founders of Waterman-Loomis alfalfa (Harold Loomis on left, Ward Waterman on right), and the Father of WL 202 (Dr. Dave Beard at center).

advantage over all other alfalfas (all publics) currently in use. Over its 8-year sales run, we sold nearly 1 million pounds of WL 202, a huge sales volume for a single variety in the early years of the proprietary alfalfa seed market.

This year, we celebrate W-L's 50th anniversary. From our founding in 1958, we have been a research-focused alfalfa company, with 77 released alfalfas to our name (and counting), spanning fall dormancies from 2 to 10, all with performance second to none. "Better Seed Through Research" is what we've delivered to our customers (both growers and seedsmen) for over 50 years, and all of us at W-L look forward to building on this success over the next 50 years. ■



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Record Alfalfa Hay Prices Reported Nationwide

Alfalfa hay will be a very valuable commodity in 2008. Record or near-record alfalfa hay prices have been reported throughout the U.S., with several regions (West, Midwest) reporting historically high hay prices with no end in sight. The average premium alfalfa hay price in California and Wisconsin is \$250 and \$173 per ton, respectively (see Table below). Nationally, alfalfa hay prices averaged \$185 per ton, up 37% from one year ago. Below-average hay production in 2007, heavy winter hay usage, and fewer alfalfa acres seeded have led to very tight hay stocks before first cut. Now, with Winter refusing to let go, there are indications that first-cut alfalfa yields in 2008 may be down across the U.S. In addition, wet Spring conditions will delay new alfalfa plantings, further reducing total tonnage produced in 2008.

Strong milk prices have also encouraged dairy expansion and driven up demand and reduced the supply of premium quality alfalfa hay. How long will this strong sellers market continue? Through at least Spring and Summer, the outlook points to higher prices. The recent USDA planting intentions report indicated that we can expect to lose 2%, or 1.2 million acres, of our all-hay production to grain crops in 2008. In addition, new alfalfa seeded acres are projected to be average at best (especially with \$6 corn, \$13 soybeans, and \$10 wheat), so unless we have huge hay yields this season, the fundamentals are in place for strong alfalfa hay prices well into 2009.

Historically low alfalfa hay stocks, lukewarm alfalfa seeding intentions (due to sky-high grain prices that are snapping up available acres), and strong dairy production all point to a very good year for alfalfa hay producers in 2008. ■

Premium Alfalfa Hay State Avg. Price Per Ton

California	\$250	New York	\$188
Idaho	\$185	Oklahoma	\$150
Illinois	\$180	Pennsylvania	\$231
Kansas	\$158	Wisconsin	\$173
Missouri	\$164		

