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The Alfalfa Seed Market Here We Go Again?

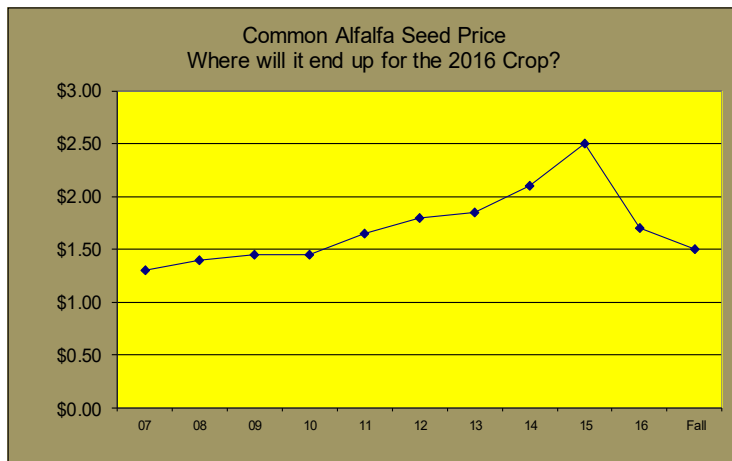
DEMAND: Alfalfa consumption is generally down across the board. Hay prices have really dropped. Both dairy and beef are depressed too. Most major markets that consume alfalfa are feeling the pinch.

PRODUCTION: Total alfalfa seed production acres have been increasing in both Canada and the USA. Most cash crop commodities are hardly turning a profit, so farmers are looking at other crops to survive. Alfalfa seed and leafcutter bees look attractive. Luckily for the market, Canadian alfalfa seed growers have not experienced bumper crops over the last few years. In 2016 excess moisture has dampened crop prospects for most of Saskatchewan and Manitoba. Alberta reports an average crop, partially due to hail and rain. Pacific northwestern states are well into their harvest, with rumors of an average crop being harvested. The "South Dakota Common" crop appears small this year, but much of the huge 2015 crop remains unsold.

DEMAND IS DOWN—PRODUCTION ACRES UP—PRICES GO DOWN

Though we have barely begun the alfalfa seed harvest in Western Canada, it appears the market is taking a nose dive. Prices peaked last year at this time and have steadily declined ever since. If the stars line up the way it looks, expect alfalfa seed prices at the farm gate to be considerably lower in 2016. One bit of optimism might be that when prices go down, sometimes Europe and China become buyers.

COMMON VS. CONTRACTS: For the past five years, growing common seed with no contract has been very attractive. Financially it has run a very close second to producing seed under contract. This way of thinking is changing in the industry. Starting last year, regular common seed was becoming much harder to sell. Part of it was due to the big common catch crop in South Dakota, and part of it is a shift towards better varieties. Varieties with improved traits such as a good disease package, or multi-leaf expression are favored over regular common. Quality will also be more important than ever. If seed buyers have a choice, seed with certain traits, with good germination and free of noxious weeds, will be purchased first and command the best prices.



Crop Tour August 2016:

Gavin was able to get a look at most of the contract fields again this year. It has been a wetter year for the most part compared to last year, with the exception of northwest Saskatchewan. There is a lot more disease, lodging, and poor seed set in the areas that received more rain. Overall the seed crop for Saskatchewan will be below average. The picture on the right is typical of all those fields that got too much rain. Whatever seed there was, is now rotting below all the new growth. The picture below shows one of the best fields. Very little bloom left and lots of plump curls. Sure wish it was our crop!

The same problem weeds are showing up again. **Canada**



Still looks like a hay field in late August



Pretty nice seed here

Canada thistle is the most abundant weed this year. Lots of growers went with a pass of Pardner around July 10th. Even without perfect weather, there was good activity on the Canada thistle resulting in very limited thistle seed production. Growers are beginning to think that under some conditions, the July Pardner application can actually result in increased alfalfa seed set. We did a lot of July Pardner on our farm, leaving unsprayed checks in each field. Our yield maps at harvest should show any effect the Pardner may have had on the alfalfa seed yield.

The next most prevalent weed was **sweet clover**. There are still a lot of fields that have sweet clover in them, and still the best solution is pulling the sweet clover by hand. Some growers have had good success using Velpar and/or Simazine in the fall to thin the amount of sweet clover the next year. Also some growers are using two passes of Pardner in July. It stunts the sweet clover, but there was still a lot of regrowth on the sweet clover after two passes of Pardner depending on the field. If sweet clover ends up in the combine hopper, it is virtually impossible to separate in the seed plant.



Typical thistle patch—No Pardner here!

Excellent Canada thistle control here from a single Pardner application on a hot day in July



Pulling Sweet Clover



Better line up some kids for walking and pulling

Crop Tour August 2016 Continued:

KOCHIA: There appeared to be less kochia this year compared to last year, with a few fields still being at levels that may not make contract. Authority and Valtera as well as Edge are working well on the kochia. The use of soil residual chemicals seems to be getting kochia under control. One other note on kochia is that their seeds only survive in the soil for around four years. If you can stop the kochia plants from setting seed for a few years this really starts to show up with less and less plants germinating. Even in new alfalfa/companion crop fields, if you have patches of kochia, it is a good idea to mow them down to prevent them from going to seed.

Volunteer **CANOLA** would be the next most prevalent "weed". We have been using Valtera in the fall after establishment to control volunteer canola in first year alfalfa stands. It has worked fairly well. This year with more rainfall in June there was a flush of volunteer canola that it did not get. We ended up spraying Pardner in July on it and it worked OK.

CLEAVERS still make the list as well. They were not as bad this year but still showing up in some fields. I think with growers starting to use more products like Authority, Valtera and Edge we are getting more of the cleavers under control which is a good thing.

Kochia is looking pretty healthy here



This canola may make seed



Cleavers are looking good here



Gavin's Tour: On The Road to Pilger

WATER:

The biggest problem faced by most alfalfa seed growers is simply too much rain. Overall most fields were looking OK considering how much rain most of them had received. It is a hard crop to keep weed free, and hard to produce alfalfa seed under high moisture conditions. Most growers have been adapting to these higher moisture conditions and will still produce some seed. Those

using fungicides are usually seeing improved yields. Still when the rain gauge starts towards 20", it doesn't seem like any amount of management can save the crop.

Pask Farms Seed Plant Upgrades

As farmers, we constantly look for ways to increase production without increasing our operating costs, or our labor. We apply the same management strategy to our seed plant. The only crop we process is alfalfa seed. That makes it much easier to tailor the equipment to very specific weed and crop issues. Separating alfalfa seed perfectly from everything else is an ever elusive goal, but one we continually strive to achieve. The first objective is to keep “everything else” out of the clean alfalfa seed, while keeping the alfalfa seed out of the “everything else” pile. Last year we put in a new mill which made a better separation with faster throughput, when compared to the mill it replaced.

This year we are adding two more mills which we think will help more accurately separate out lambs-quarters, cleavers, and kochia. Today, with a bit of rain and many frustrated grain farmer neighbors at the coffee shop, we are tuning up the other equipment for another year. Our diversification allows us to retain excellent, experienced people like Lloyd, shown here putting the final touches on the indents. We switch from working with bees, to farming, to seed plant, to seed business. It keeps everyone working year round, which reduces our seed plant overhead. Tightening the margins mean more money to you, while at the same time offering our customers a quality product at a lower price.

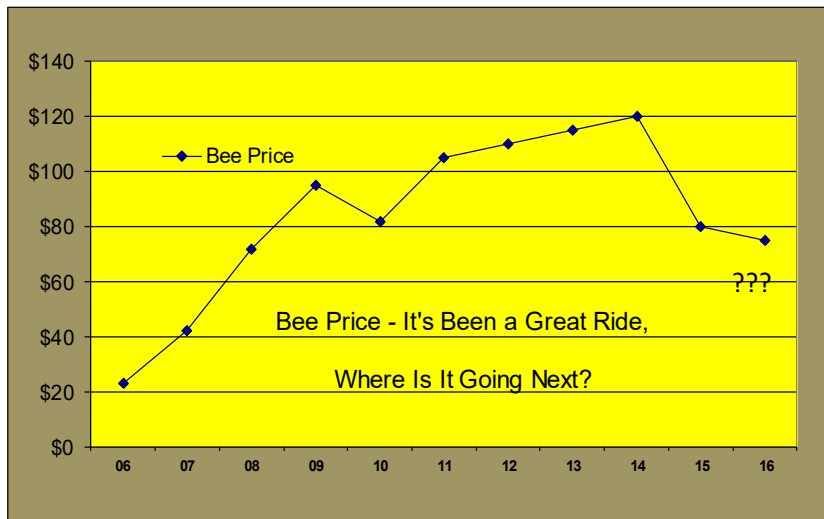


Leafcutter Bee Market

Many farmers started growing alfalfa seed because they were intrigued with the leafcutter bee. At times bee prices have better returns than alfalfa seed, other times alfalfa seed is up and bees are down. Usually both are never up at the same time! When that does happen new growers enter the industry. It has been a great ride the last while. I thought the big bee prices would end last year, but most still sold for \$80-\$90 per gallon. They were getting short by March and even hit \$120.

Lots of rain during the growing season usually equates in less bee reproduction. This seems to be the case in our discussions with growers. More acres producing bees this past year will likely offset the lower returns. With the possibility of too much alfalfa seed in the pipeline, bee sales to the United States compared to last year may be flat at best. This past spring Canadian producers kept bees back to build up their own acres, putting fewer gallons on the market. I do not anticipate a big jump in acres in 2017, so fewer bees will be consumed internally, in turn putting potentially more bees up for sale.

If bee inventories end up similar to last year, and demand remains constant from our three major markets, prices should not be too far off last year levels. \$70-\$90 per gallon could be possible, especially if the Canadian/USA exchange rate remains near today's level. Every US \$1.00 today brings us about \$1.28 in Canadian funds. A pretty attractive exchange rate if you are selling bees and alfalfa seed into the USA.



VELPAR—ARE WE LOSING A TOOL?

Velpar is a very important weed control product for established alfalfa seed fields. Some farmers will swear by it and use it every year no matter the cost, and others say it is way too expensive for the weeds it controls. We quit using it for a couple years and for us that was a big mistake. We missed the control it had on our biennial wormwood, curled dock, and sweet clover to name a few. We backed away from it because we thought it was hurting our alfalfa, but have been back using it ever since we confirmed it was alright. It can have negative effects to alfalfa stands planted on light, sandy, or soil low in organic matter. If you have not used it be aware of these soil types.



It always has been a very expensive product to use. In the last few years the price per 2 kg package has dropped from \$175 to \$120. Since Dupont sold Velpar to Tessengerlo Kerley Inc., the price has shot up to \$250 plus. \$250 for 2 kg is \$40-\$50/ac. We even had a quote of \$300 from one supplier. If anyone was skeptical about using it before, the new price makes the decision even harder.

As a seed processor, and as a farmer, this is concerning because it is another option for weed control in alfalfa seed. The concern was brought to the SASPDC's attention. The board and Wayne Goerzen have been looking into the matter. Before Dupont started to cut the price, growers were bringing Velpar in from the USA.

Velpar was an approved product that could be imported from the USA through the GROU program (Grower Registered Own Use Program). This program was used to bring products such as Reglone, Pursuit, and Velpar to the Canadian alfalfa seed grower at prices cheaper than they could purchase them here. Velpar has since been removed from the approved list of products that can be imported.

GROU is administered by Health Canada's Pest Management Regulatory Agency (PMRA). PMRA is in place to ensure chemicals are safe and pose no risk to our health or environment. Though nothing has changed with Velpar, it is now under special review from a complaint it received from a group in Europe. It sounds like a very long process to get a product back onto the GROU approved list of chemicals, so for this fall we are stuck paying \$250-\$300.

Harvesting Your Alfalfa Seed Crop:

Every fall we get some calls on what works best to dry down the alfalfa for harvest. There are a few options out there, depending on the expected yield, the maturity, the time of year, the vulnerability to wind damage, and the budget. Every year is different and no method is always perfect.

MOTHER NATURE—FROST: This option does not make a lot of sense unless you have a poor crop and a lot of patience. It takes about -7°C to start drying the stems, and that may not come until well into October. You can easily end up harvesting in October, November or May during these wet years. By then what you saved in dollars by not spraying, you have more then lost on mature seed falling off the plants.

SWATHING: Some growers swath some or all of their alfalfa seed crop. This is a cheaper alternative than desiccating with Reglone. It provides a guaranteed dry-down, and often a quick harvest. High winds are the issue, as these pictures show. It works great if the swaths stay where you put them, and the late fall rain and snow holds off. Sometimes the swaths get too wet, or snow covered, and can't be combined until spring. That's frustrating if the neighbors are straight combining and you're standing.



This was the last time we swathed



DESICCATION: This operation has the most upfront cost of all three but can also have the most benefit. It dries down the crop quickly and evenly allowing you to harvest quicker with the hope of saving some of the early seed that was set and is still hanging on. The wind still can cause damage, but having your swaths blow away is another deal altogether. You also need to be ready to harvest the crop in the 7-10 day window after you have sprayed the crop. Alfalfa is always ready to regrow from the crown. Under the right conditions—early, warm, good moisture—that regrowth can beat the combine to the field. This problem happens more frequently on first year stands. When there is too much regrowth it makes it very hard to do a good job separating the seed and you end up either losing some out the back of the combine, or desiccating a second time.

PRODUCTS FOR DESICCATION:

Reglone— The most commonly used product at .9 to 1.1 L/acre in 15 gallons of water minimum and more is better.

Liberty or Golden Harvest— Some growers have been using these products. They say that the crop dries down a little slower, but that there is no regrowth of the alfalfa in the fall. We haven't seen this on our farm, but will try these products against Reglone on the same field this year. That will give us a better idea how these products work in a year with lots of green regrowth.



Glyphosate Products such as Roundup— This use is totally off label, but many growers are using glyphosate products to terminate stands in the last year of seed production. The big concern here is potential effect on germination. We have seen germination hurt by other products (don't start adding 24D or Banvel to the mix), but have yet to see germination hurt on alfalfa seed by Roundup. Many of you have identified seed lots that were sprayed with Roundup. We've sent samples to the seed lab with specific instructions to look for glyphosate issues, but nothing of concern yet. Still remember we are buying and selling **seed** and it must **germinate**.

HARVEST MOISTURE AND HEATING IN THE BIN

The easiest way to ruin alfalfa seed is to have it heat in the bin. We can email you a chart for alfalfa seed for the 919 moisture tester. Our experience is that about 14% moisture is the line depending on grain temperature. You can successfully aerate alfalfa seed to both dry and cool it. Alfalfa seed really restricts the air flow and your fan must be able to provide good air movement through the seed. You may be limited to aerating a partially filled bin in order to get enough air movement. We had one load of seed delivered to the plant last year that was heated. The germination was down to 50%. The seed was significantly discolored, smelled and was nearly ruined. Most customers want 90% germination in any seed they buy, so please keep moisture and temperature in mind when binning your alfalfa seed this fall. If you do have a bin heat, move it and separate it into "good" and "not so good". Then send us samples, so we can figure out how to blend it and get you the most money. If heated alfalfa shows up unannounced, you can easily be taking it home.

Combine Settings

It seems like the newer the combine, the tougher it is to do a good job on fine seeds. At one time the combines were all built pretty similar, so it was easy to give advice on how to set a combine. Now there are machines with conventional threshing and rotary separation, complete rotary threshing and separation, and some very different wind—screen setups. Most combines built today are not designed to harvest your alfalfa seed crop. Still there are some basics:

Threshing: Alfalfa is hard to thresh. A few filler plates and some cylinder RPM did the job in the olden days. The rotaries use narrow spaced openings in the concaves or various combinations of concave blocking and additional concave bars to get the job done. Fortunately flax and spring wheat are also hard to thresh, so if you have no white caps in wheat, you can likely thresh alfalfa seed. Watch for cracked seed on hot days with lots of cylinder RPM. You might need a magnifying glass to see the damage, but it ruins germination and increases dockage, as the seed plant will remove the cracked seed.

Separating Seed from Straw: Green, tough straw is the killer here. Its hard to get those little alfalfa seeds separated from the straw before everything goes out the back of the combine. Usually rotor loss on alfalfa seed is not a big deal.

Wind and Screen Separation: This is where the problem sets in. The sieve often gets overloaded, or unevenly loaded, with lots of heavy material. Somehow the combine is supposed to shake and blow this apart, and get all the seed to get to the hopper. If that top sieve isn't loaded evenly, you can blow the seed out on one side, and walk it out on the other side. Anything you can do to reduce the amount of material on the sieve is well worth doing. It is really hard to separate wet, green trash from alfalfa seed. There are lots of jobber sieves on the market, but what works for you might not work for me. A 1/8" diameter round hole sieve, or a 4.5/64 x 1/2" slotted sieve does a fair separation of pods and alfalfa seed. Be careful not to restrict the wind thru the top sieve. Back off the ground speed, and sometimes you simply have to wait for the crop to get drier.

Seed Loss: There are about 200,000 alfalfa seeds in a pound. If you have about 5 seeds per square foot spread uniformly across the harvested area you have about 1 pound/acre on the ground. We are cutting 35' and catch everything coming out of the combine in a box 15" wide (in the direction of travel). The seed in that box represents about 1/1000 of an acre. 200 seeds in that box is 1 lb/acre, and 200 seeds only weigh about 0.5 grams. It is really hard to reduce your losses below 5 lbs/acre.



SEND US YOUR ALFALFA SEED SAMPLES

We need samples and weight estimates on all the contract production you have for us. If you have common alfalfa seed, or other VNS alfalfa seed, we'd like a shot at buying that. Our current guess on common alfalfa is:

\$1.50 per pound picked up in your yard

We hope that guess will be low, but time will tell. Please send us a 1 kg sample of both your open market seed, and the seed that is under contract to us. We will do a detailed dockage test and give you a dockage and price quote on open market seed.

Good Luck With Harvest and Safe Farming !!

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