

## Vermilion and Vegreville Hemp Workshops

February 06 and 08- 2018

Good afternoon everybody. It's great to be here today to share with you some of my experiences of growing industrial hemp. My farm is located just north of the town of Viking. If any of you have travelled towards Viking on Hwy 36 you might have noticed this different looking crop on the west side about a mile this side of town. I've been growing hemp for 4 years now and it has become a valuable cash crop for our farm as it fits really well with our operation. I have to add a caveat here, I'm an organic farmer but saying that, what I am sharing with you about growing hemp applies both to conventional and organic operations.

Now I don't profess to be an expert on growing hemp as I continue to learn something about this most interesting crop every year. I've had some successes and some wrecks. If you plan on growing hemp it's my hope that you can take advantage of my mistakes so you can be successful and put more grain in the bin.

Contrary to popular myths out there, industrial hemp is not a miracle plant where you just throw it in the ground and it comes up, out-competes weeds, is disease free and is immune to all pests. That is not true. Another myth out there is that hemp is almost impossible to harvest as the stubble will flatten tires, your combine will burn down and your cows will get high if get into the field. Those too are myths. Granted, hemp takes more management at harvest time than your conventional crops but that obstacle has mostly been overcome with the newer combines out there. Also, cows do not like the taste of hemp and will not eat it while it is growing. At least that's been my experience.

I will go over my experiences from application of a licence to seeding, harvest, storage, cleaning and selling, hopefully clearing some confusion and difficulties that might have kept you from considering growing this crop.

- **Applying for a license.** Go to Health Canada website and follow the links regarding Industrial Hemp. Police check is about the most difficult part.

- **Seed selection.** Talk to the seed suppliers. Most grow more than one variety. They will be happy to tell you what works best for them and what might work best for you.
- **Field selection.** While hemp is a great competitor, the cleaner your field the better. Be very wary about going into wheat stubble. Hemp is gluten free and buyers don't even like a little wheat or barley in it. It's hard to clean out as well. Better following something like peas, faba beans and canola but be wary of sclerotinia. Hemp also likes good, loamy well drained soil and really struggles in heavy clay soils. Heavy compaction is also an issue.
- **Fertility.** Hemp responds to good fertility. Treat like canola. For us organic producers' limited fertility is a major issue. That's why I am now using cover crops and plowdowns.
- **Seeding.** I've been seeding the first week in June. I do that mostly because I like to get a good kill on my weeds because as an organic producer my in crop weed control is nil. I rely on heavy seeding and completion. I see at 25-30 lbs per acre. That seems to be the industry norm although some are going as low as 20 and some organic producers are trying even higher rates.
- **Seeding depth.** Seed as deep as you would canola or flax. No more than an inch. I know they say to seed to moisture but you can seed to deep. Hemp is a weak plant until it gets out of the ground.
- **Seeding tools.** You can use your regular seeding equipment. Be wary of cracking seed by using too much air.
- **Seeding dates.** Like I said earlier, I seed after the first week of June and have had no problems harvesting. I've re-seeded up to a month later in July. While the yields were down I did get a crop.
- **Field preparation.** Like all other crops, seed into a firm moist seedbed. Do not mud it in! Wait until fields are ready. You can delay seeding hemp up until the First of July and still get a crop. That is why re-seeding hemp works well if you've had a wreck like 4 inches of rain right after you've seeded your crop or if gophers or cutworms have eaten all your emerging plants.

- **In crop weed control.** I can't speak at all to this as I have had no experience but I know they are working on new herbicide registrations all the time.
- **Pests.** Pests can be a problem. The two that have caused me the most problems with significant financial losses are Richardson ground squirrels and cutworms. These are especially problems when coming out of grass situations. And even if you think that just a few gophers won't be a problem don't get fooled. I've lost almost entire fields due to adolescent gophers. They love young hemp plants and once cut off it does not grow back. Control your gophers in April.
- **Harvest.** I use a 9610 JD combine. I did modify it a bit by changing the speed of the back beater, replacing the feeder chain with a continuous belt and narrowing the front opening. I use a honeybee straight cut draper header. Most of the newer combines out there work really well in harvesting hemp the older ones not so much as there can be wrapping issues. Again talk to guys who are growing it and find out what they are using. Fires can be an issue either from wrapping or the dust. Keep your combine clean and blow it off during the day as the fine dust is very flammable. This is more of an issue with those who've swathed their hemp and the straw really dried out. I harvest when the grain is testing 16% moisture or less. Any more moisture and you tend to have issues in the bin. I put it directly into an aeration bin. You can't fool around here. Don't even let the grain sit in your truck overnight. It will start heating on you and it is worth too much to let it spoil! It's so important to get air on it as soon as possible.
- **When to harvest.** Picking the right time to harvest hemp is like an art form. Hemp continues to produce seed as long as there is moisture and you've not had a killing frost. But just like canola, you can wait too long and you can lose some of the bottom seeds from shelling. Too early and you can lose potential crop and too late you can lose to shelling in a wind storm. This mostly come from experience and in another 10 years I can tell you definitively when is a good time!

- **In the bin.** So once you have it in the truck you feel you're now safe. Not quite yet. Hemp is a raw seed product and you have to treat it that way. Any contamination and you run the risk of a load being rejected. Make sure your bins and equipment are clean. If you start your auger and mice start scurrying all over you may have a problem. Your bins will need aeration at least until it is dried down to 9% or less. Even then I would watch it. Watch it and turn it occasionally. This is a valuable crop and you've worked hard to get it this far. No sense losing it now.
- **Cleaning.** You have to find an approved cleaner that is licence to handle hemp. This too is an issue as cleaning facilities are sometimes reluctant to go through the process to get a license. If you are considering growing hemp put pressure on your seed cleaners to get their license. It will help reduce costs. I've used cleaners in Sask, Manitoba, and southern Alberta. I'd love to find one closer to home.
- **Selling.** It is a really good idea to sign a contract with a company that will buy your hemp. This is especially important for those who grow conventional hemp. There is more demand for organic hemp but just the same it's good to know what you will be getting and that someone is going to take it off your hands. You don't need it to sit in the bins for a year before you can move it. Talk to your processor.
- **In conclusion.** Well that concludes my talk and I'm more than happy to answer any questions you might have. I believe hemp will play a significant role in western Canada in the near future as markets develop and farmers search for an alternative cash crop to diversify their rotations and cash flow. I also have just a few pictures to show you of hemp on my farm.  
Thank you.