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# Harvesting Canola

Three areas to optimize:

1. Minimize Loss
  2. Maximize Throughput
  3. Maintain a Clean Sample
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# Having a clean sample is the least important!!!

Trash in your sample only costs you the space it takes up in the truck. The weight of the trash gets subtracted from the total weight, but you don't get penalized for it.

I typically have 3-5% dockage and that's perfectly fine by me. The trash is light and floats to the top so even just 3% will look pretty bad in the combine, look at it again when it's in the truck. If you haul straight to Viterra they will tell you what your dockage is on every load.

Trying to get a perfectly clean sample WILL cost you money (increased loss & reduced throughput).



# Start with the header!

- Most headers can do an acceptable job harvesting canola with some adjustments.
- Getting canola into the machine (header performance) is often what limits your throughput.
- Loss from the header can be very significant!
- Certain types of headers will perform better than others.

# Header loss

Header loss when harvesting canola comes from three things; 1-Pod shatter from the reel, 2-Canola getting thrown forward from the auger, 3-Pod shatter from the crop dividers.

Crop Dividers - Make sure crop dividers extend above the top of the crop, adding a piece of PVC pipe over the divider can help.

Smooth flow - Try to prevent anything that may snag the canola on the sides of the header



## —The Reel

- You want the reel as far back as possible.
- Engage the reel just enough to induce the crop to flow back into the header, but not so much as to cause unnecessary shatter. Don't have the reel deep into the canopy.
- Roughly match reel speed to ground speed to minimize contact with the canopy.

## Auger headers -

- Raise the auger above the table as high as possible
- Auger fingers should be adjusted so they reach as high as possible to pull the crop down under the auger

## Draper headers -

- Cross-auger speed should be set so it matches or is slightly faster than draper horizontal speed
- Cross-auger should be positioned so it forces crop down against the draper.
- Don't have a cross-auger? Get one.

# At some point a canola focused header will pay for itself!!

A header that is optimized for canola will allow higher throughput and have less grain loss. Based on studies and my own experience you can save around 50 lbs/acre in loss and can gain about 30% increased throughput. Together those are worth up to \$15/acre.



# Combine Setup



## Keys to Success

- **Check your actual loss**  
Watching your combine loss monitor and/ or looking on the ground will only lie to you, and not in the way you want
- **Optimize your machine for canola**  
Little changes and adjustments can make a big difference
- **Slow down**  
#1 best way to reduce loss



# Checking Loss

The ONLY way to know how much loss you are getting is to take a sample of what's coming out the back of your machine, separate out the canola from the straw/ chaff, and measuring it.

You can purchase drop pans that attach to the bottom of your combine and drop at your command. Or you can use something as simple as a plastic bin on a stick. This can be as simple or as complicated as you want as long as it works.





# The hard part - Cleaning & Measuring

Once you have your sample from the back of your machine, you have to separate out the canola from all the other material. I use buckets with different sizes of screens in them. After screening you will need to use air to blow out the chaff that gets through the screens.

With a clean sample you can then measure it, either by weight or volume, and from there calculate your loss per acre.



## Tip

You can use a leaf blower to help separate the chaff after screening out the larger material

# Optimize your combine - setup with canola is different than wheat

With wheat generally what we are trying to do is get everything threshed and then pushed out of the rotor cage. Canola is the opposite, we want to keep as much material as possible in the rotor cage so we don't overload the sieves with chaff.

Canola is pretty much threshed out before it even gets to the rotor. You want lots of concave clearance and slower rotor speed.

Canola is easy to blow out the back, start with your fan speed low and increase it slowly until the sample starts to clean up, then go check your loss.

# Settings Comparison

## Wheat -

- Concaves - 6 mm
- Rotor speed - 770 RPM
- Fan speed - 1050 RPM
- Upper sieve - 15
- Lower sieve - 8-12

## Canola -

- Concaves - 20-35 mm
- Rotor speed - 610 RPM
- Fan speed - 650 RPM
- Upper sieve - 15
- Lower sieve - 8-12

One of the most useful tools you have for evaluating your combine's performance is the kill-stall. Use it often. If you haven't done it before the procedure should be listed in your combine's operators manual.

# Want to reduce loss? Slow down!!

Slowing down is the easiest way to reduce grain loss. Canola harvest isn't a fast process, usually it's a lot slower than harvesting wheat. Haste makes waste.



If your combine can show how many bu/ hour you are harvesting, that can help you drive the right speed.

Since canola harvest is slower, you may want to change how you do things.

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# Questions?

For a copy of this presentation plus LOTS of links to more information email [jesse.brunner@gmail.com](mailto:jesse.brunner@gmail.com) and put Canola in the subject line.

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