# Field Crop Report Ontario

# Maintain 30% soil cover all year long

Keeping the soil protected throughout the year is easy. Leave enough residue on the soil in the spring so there is at least 30% residue cover left after planting. 30% is not a lot but it can go a long way to protecting the soil from wind and water erosion. As that residue breaks down the crop fills in to provide the cover through the season. After the crop is harvested leave the residue untouched, minimize tillage to leave residue on the surface or plant a cover crop to provide soil cover through the fall, winter and into the spring. The soil cover provides more benefits than soil erosion protection. The residue provides food for earthworms and other soil life. It conserves soil moisture, improves soil structure and can help maintain or increase organic matter. Good soil structure allows more water to infiltrate into the soil. All of which can lead to improved yields.

## **Tillage Considerations**

#### Every tillage pass breaks down soil structure and aggregates:

Good soil structure is important for water movement into the soil. The more water that goes into the soil, less runs off and is lost. Well-structured soil allows more air in the soil to support root growth and soil life.

### When it comes to tillage, whoever makes the least passes wins.

Fewer passes leave more residue on the soil surface to protect from erosion, and also saves labour and fuel. Design your tillage system to keep soil out of surface water.

# The tillage system must be economical.

Avoid excessive tillage. In many cases, tillage does not pay for itself in additional yield. The tillage system should be sustainable in the long term.

Depleting organic matter levels and allowing the soil to erode is not sustainable.

#### **Planter Considerations**

#### Let the planter or drill do a tillage pass.

Adding coulters to the planter or drill can save a tillage pass, or eliminate the need for tillage all together. Trash whippers can remove residue from the row, doing away with one or more tillage passes. Utilize a wide range of planter attachments to ensure good seed-tosoil contact.

# **Cropping Considerations**

#### Longer crop rotations are better.

Including a wide variety of crops will help increase organic matter levels, reduce pest problems and increase crop yields.

#### Include cover crops as much as possible.

Cover crops can provide a wide variety of benefits, such as soil cover to protect against erosion, adding organic matter and improving soil structure.

# Manage residues at harvest.

Proper spreading of crop residues at harvest can reduce the need for tillage and avoid uneven soil drying in the spring.

Winter wheat: No-tilling winter wheat into soybean or edible bean residue is the most profitable system, and provides the most soil cover.

#### Soybean residue not going into wheat:

If the residue is spread evenly no tillage is likely needed. Coulter tillage or light secondary tillage may even out soil drying if residue is not evenly spread. Primary tillage of soybean residue generally provides no benefit

Soybeans: No-tilling soybeans into corn residue is the most profitable system, and provides the most soil cover.

*Corn:* Reduced tillage and good residue management produces yields equivalent to moldboard plowing. This often costs less and provides more than 30% soil cover. No-tilling corn after corn results in lower corn yields,

although it provides the most soil cover. Many growers successfully no-till corn after



Wanted dead or Alive! At least 30% soil cover, 100% of time



soybeans and cereal crops, while protecting the soil from erosion.

Location	Oct 15 - Oct 21	Temperature ( °C)		Rainfall	Heat Units	Total Since May 1	
	2014	Max	Min	(mm)	CHU	Rain	CHU
Outdoor	2014	13.0	5.7	20.4	-	522.2	2944.3
Farm Show	30 Yr. Avg.	13.0	4.0	18.3	-	485.7	3174.4
Windsor	2014	14.8	8.5	4.2	-	597.3	3482.7
	30 Yr. Avg.	14.7	5.2	14.6	-	444.0	3476.3
Trenton	2014	14.1	7.1	44.7	-	517.6	3153.5
	30 Yr. Avg.	12.4	2.9	21.9	-	460.7	3047.1
Mount Forest	2014	11.0	5.5	21.4	-	516.0	2797.8
	30 Yr. Avg.	12.0	3.4	19.5	-	497.4	2943.0
London	2014	13.1	6.5	13.8	-	528.9	3145.1
	30 Yr. Avg.	13.3	4.2	18.8	-	488.1	3215.0
Hamilton	2014	14.8	7.1	11.2	-	436.1	3073.9
	30 Yr. Avg.	13.2	4.1	16.2	-	446.6	3232.1
Ottawa	2014	13.1	7.9	21.6	-	489.3	3154.8
	30 Yr. Avg.	12.3	3.2	21.6	-	498.5	3132.1
Elora	2014	12.2	5.8	18.5	-	574.5	2762.1
	30 Yr. Avg.	12.2	3.2	16.9	-	477.8	3018.3
Peterborough	2014	12.9	6.1	42.7	-	521.1	2847.0
	30 Yr. Avg.	12.1	3.0	19.4	-	460.6	2986.4

1-888-449-0937 or visit fieldcropnews.com

