

# COVER CROPS 2017

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HURON COVER CROPS

HENSALL, ON

[@HURONCOVERCROPS](#)

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# BACKGROUND

- FARM 1100 ACRES
- NO-TILL EARLY 90'S
- STRIP TILL MID-LATE 90'S
- MINIMUM TILL 1999-PRESENT
- NO-TILL SOYS & CEREALS – MIN TILL CORN
  - 2012 HARVEST 1<sup>st</sup> RYE
  - 2013 HARVEST 1<sup>st</sup> OATS
  - 2015 HARVEST 1<sup>st</sup> BARLEY
  - 2016 1<sup>st</sup> SUNFLOWER, BUCKWHEAT
- 2017 1<sup>st</sup> FABIA BEANS, CHICKLING VETCH, COWPEAS, W. TRITICALE







# HURON COVER CROPS

- LOCAL COVER CROP SUPPLIER
- 6,000+ac CORN INTERSEEDED
  - 15,000+ac POST CEREALS
  - 3,500+ac POST SOYS & CORN
- TRYING TO PRODUCE AS MUCH SEED  
LOCALLY AS POSSIBLE
  - KEEP PRICES IN CHECK
- CUSTOM MIXES FOR INDIVIDUAL  
SITUATIONS
  - COVER CROP TRIALS
  - VARIETY EVALUATIONS

# COVER CROPS WE USE

- CEREALS > CORN
  - *POLY CULTURE – DIVERSITY & LEGUMES*
- CEREALS > BEANS
  - *POLY CULTURE – DIVERSITY & GRASSES*
- SOYBEANS > CORN
  - *BARLEY/OATS/RYE/BRASSICAS/FABA/AWP/VETCH*
- CORN > BEANS
  - *UNDERSEEDDED EARLY SEASON*
  - *CEREAL RYE LATE SEASON*
  - *SPRING PLANTED POLY CULTURE*

# WHY WE USE THEM

- *ADDED DIVERSITY*
- *CYCLE NUTRIENTS*
- *“UNLOCK” NUTRIENTS*
- *PRODUCE NITROGEN*
  - *REDUCE INPUTS*
  - *REDUCE EROSION*
  - *REDUCE WEEDS*
- *MELLOW SOILS ALLOWING FOR NO TILL*

# COMMON PROBLEMS

- SINGLE SPECIES
- WRONG SPECIES
- PLANTED TOO HEAVY
- PLANTED TOO SOON
- VOLUNTEER WHEAT
- HOW TO PLANT COVER CROP

# CONSIDERATIONS FOR 2017

- CROP ROTATION?
  - DIVERSITY?
  - MANURE?
- RESIDUE FROM CASH CROP?
  - SEEDING DATE?
  - VOLUNTEER WHEAT?
- TERMINATION OF COVER CROP?
  - TILLAGE?



# WHAT WE DO

- LOTS OF DIVERSITY
- UP TO 32 DIFFERENT SPECIES
- LIKELY STICK WITH 12-16 SPECIES
  - NOT TOO THICK
  - SEED AS EARLY AS POSSIBLE
  - FLAIL MOWED MOST IN 2016
  - FALL STRIP TILLED SOME
- TERMINATED GRASSES LATE SEASON AND LEFT LEGUMES & BRASSICAS













































# SAMPLE SEED MIXES FOR 2017

- DIVERSE MIX - NO MANURE
  - OATS – 18%
  - FABABEANS – 25%
  - CHICKLING VETCH – 20%
  - FORAGE PEAS – 17%
  - AUSTRIAN WINTER PEAS – 13%
  - SUNFLOWER – 5%
  - FLAX – 1%
  - BRASSICAS – 1%
  - **40lbs/ac - \$20/ac**

AUGUST 10-25

# SAMPLE SEED MIXES FOR 2017

- DIVERSE MIX - MANURE
  - OATS – 30%
  - CEREAL RYE – 13%
  - FABIA BEANS – 13%
  - CHICKLING VETCH – 13%
  - FORAGE PEAS – 12%
- AUSTRIAN WINTER PEAS – 12%
  - SUNFLOWER – 5%
  - FLAX – 1%
  - BRASSICAS – 1%
  - **40lbs/ac - \$19/ac**

AUGUST 10-31

# SAMPLE SEED MIXES FOR 2017

- N PRODUCTION AND BLACK RESIDUE

AUGUST 10-31

- FABA BEAN – 88%
- SUNFLOWER – 10%
- BRASSICAS – 1%
- PHACELIA – 1%
- **40lbs/ac - \$20/ac**



# SAMPLE SEED MIXES FOR 2017

JULY 25 - AUGUST 7

- QUICK GROWTH & BIOMASS
  - SOYBEANS (own) - 40%
  - BUCKWHEAT - 20%
  - COWPEAS - 20%
  - SORGHUM-SUDAN - 8%
  - PEARL MILLET - 8%
  - BRASSICAS - 2%
  - FLAX 2%
  - **25lbs/ac - \$19/ac + soy**

# SAMPLE SEED MIXES FOR 2017

## - BROADCAST & INCORPORATE VT

### - SMALL SEEDED

- 95% CRIMSON CLOVER
  - 5% BRASSICA
  - **10lbs/ac - \$19/ac**
- 70% CRIMSON CLOVER
- 25% ANNUAL RYEGRASS
  - 5% BRASSICA
  - **10lbs/ac - \$18/ac**

### - LARGE SEEDED

- 22% OATS
- 22% BARLEY
- 22% RYE
- 28% PEAS/LENTILS
- 6% SUNFLOWERS
- **50lbs/ac - \$20/ac**

# SAMPLE SEED MIXES FOR 2017

## - BROADCAST & INCORPORATE RIPPER

- OATS – 50%
- BARLEY – 20%
- CEREAL RYE – 20%
- SUNFLOWER – 10%
- **50lbs/ac - \$16/ac**

AUGUST 10 – AUGUST 25

- OATS – 40%
- BARLEY – 40%
- CEREAL RYE – 20%
- **50lbs/ac – \$13.50/ac**

AUGUST 25 – SEPTEMBER 25



# **INTERSEEDING CORN & CEREAL RYE POST HARVEST**







































# LESSONS LEARNED OVER YEARS

- RAIN IS KEY
- SEED TO SOIL CONTACT HUGE ADVANTAGE  
IN DRY YEARS
  - TIMING JUST BEFORE RAIN IS BEST
- 30" ROWS USUALLY BETTER THAN 20"
  - HERBICIDE PROGRAMS
  - VARIETY OF RYEGRASS



# ADVICE FOR 2017

- VARIETIES – ROOTMAX or WINTERHAWK
  - SEEDING RATE 8-12lbs BROADCAST
    - SEEDING RATE 5-8lbs SEEDED
- COMPANIONS TO ANNUAL RYEGRASS
  - CRIMSON CLOVER
    - RAPESEED & OTHER BRASSICAS
      - YELLOW SWEET CLOVER
        - ALSIKE CLOVER
          - BALANSA CLOVER
            - VETCHES
- COST **\$10-15/ac** SEED + **\$5/ac** APPLICATION



# CEREAL RYE POST CORN HARVEST

- AIRPLANE EARLIER NOT ADVISED
- SPINNER SPREADER WORKS JUST FINE
- DRILL IS BEST AND SAVES ON SEED
- CAN SPREAD VERY LATE AND EVEN ON SNOW
  - 60-80lbs/ac BROADCAST \$15-20/ac
  - 30-50lbs/ac DRILLED \$8-13/ac

# AFTER BEAN HARVEST

- PLANT **WHEAT**
- INTERSEED AT LEAFDROPP?
- 2<sup>nd</sup> YEAR **BEANS** – 30-40lbs CEREAL RYE & \$10-14/ac  
1-2lbs BRASSICA – YELLOW MUSTARD & RAPESEED
- **CORN**
- 5-10lbs/ac CEREAL RYE
- 5-10 lbs/ac BARLEY \$10-20/ac
- 5-10lbs/ac OATS
- 10-20lbs/ac FABBA BEANS
- 2-4lbs/ac VETCH (HAIRY OR WOOLYPOD)