COVER CROPS 2017

STEFAN ZEHETNER
HURON COVER CROPS
HENSALL, ON

@HURONCOVERCROPS

@THEYOUNGFARMER07

(519) 902-4203

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 1st RYE
 - 2013 HARVEST 1st OATS
 - 2015 HARVEST 1st BARLEY
 - 2016 1st SUNFLOWER, BUCKWHEAT
 - 2017 1st FABA 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
- POLYCULTURE DIVERSITY & LEGUMES
 - CEREALS > BEANS
- POLYCULTURE DIVERSITY & GRASSES
 - SOYBEANS > CORN
- BARLEY/OATS/RYE/BRASSICAS/FABA/AWP/VETCH
 - CORN > BEANS
 - UNDERSEEDED EARLY SEASON
 - CEREAL RYE LATE SEASON
 - SPRING PLANTED POLYCULTURE

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

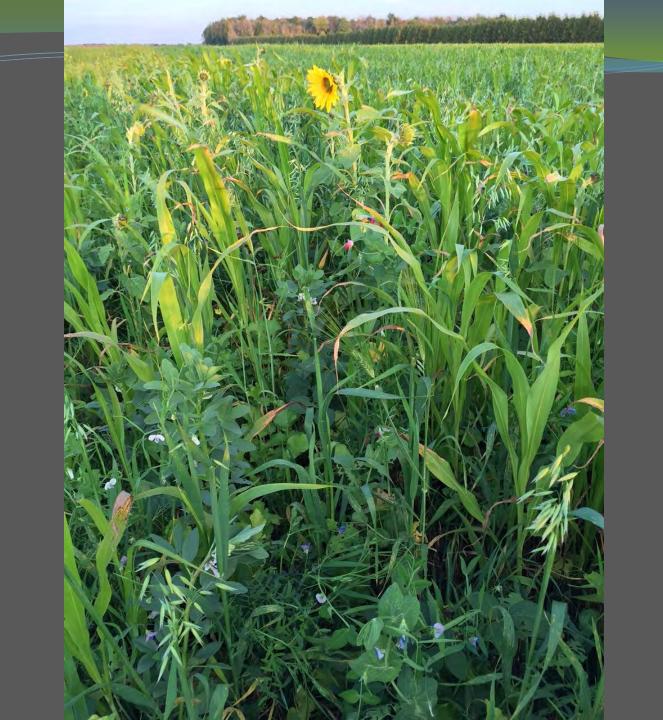
- CROP ROTATION?
 - DIVERSITY?
 - MANURE?
- RESIDUE FROM CASH CROP?
 - **SEEDING DATE?**
 - VOLUNTEER WHEAT?
- TERIMNATION OF COVER CROP?
 - TILLAGE?

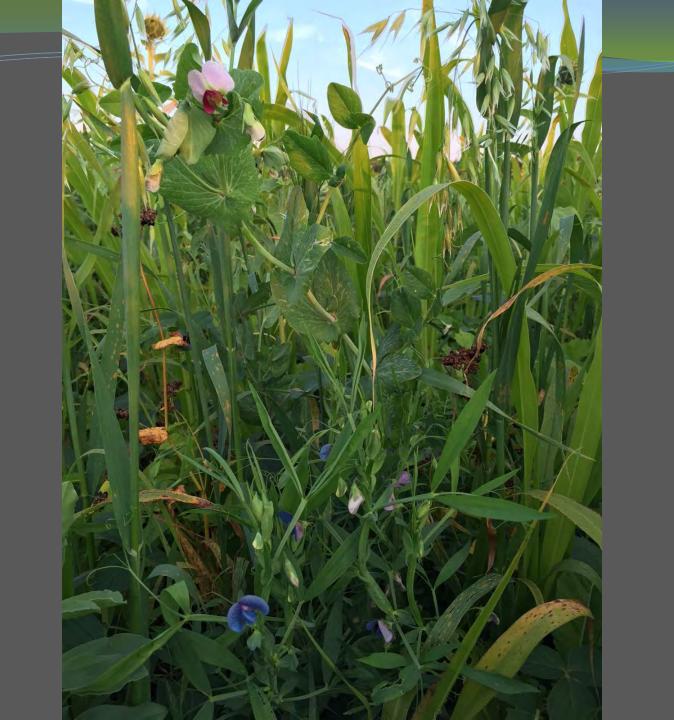
WHAT WE DO

- 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



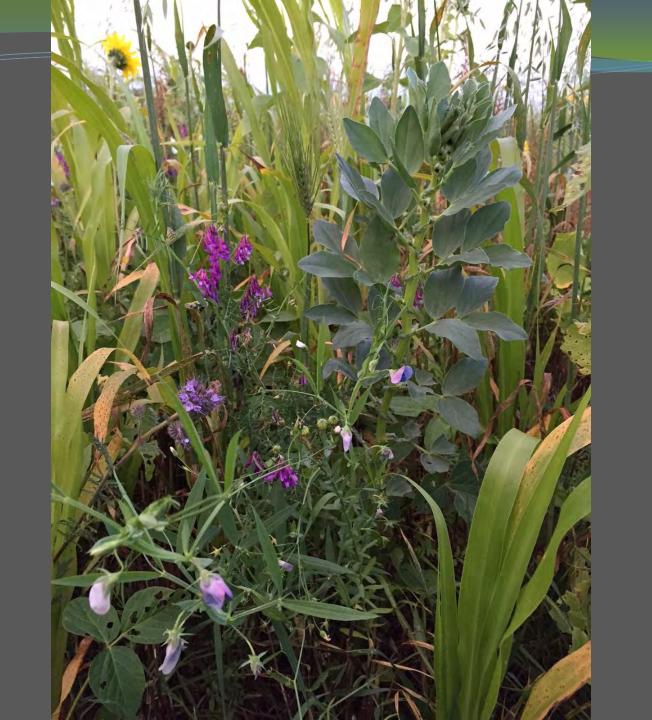




















- DIVERSE MIX - NO MANURE OATS - 18%

- FABA BEANS 25%
- CHICKLING VETCH 20%
 - FORAGE PEAS 17%
- AUSTRIAN WINTER PEAS 13%
 - SUNFLOWER 5%
 - FLAX 1%
 - BRASSICAS 1%
 - 40lbs/ac \$20/ac

AUGUST 10-25

AUGUST 10-31

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

- N PRODUCTION AND BLACK RESIDUE

AUGUST 10-31

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

- QUICK GROWTH & BIOMASS

JULY 25 – AUGUST 7

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

- **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

- BROADCAST & INCORPORATE RIPPER

- OATS 50%
- **BARLEY 20%**
- CEREAL RYE 20%
- SUNFLOWER 10%
- 50lbs/ac \$16/ac
 - OATS 40%
 - **BARLEY 40%**
- CEREAL RYE 20%
- 50lbs/ac \$13.50/ac

AUGUST 10 – AUGUST 25

AUGUST 25 – SEPTEMBER 25

INTERSEEDING CORN & CEREAL RYE POST HARVEST

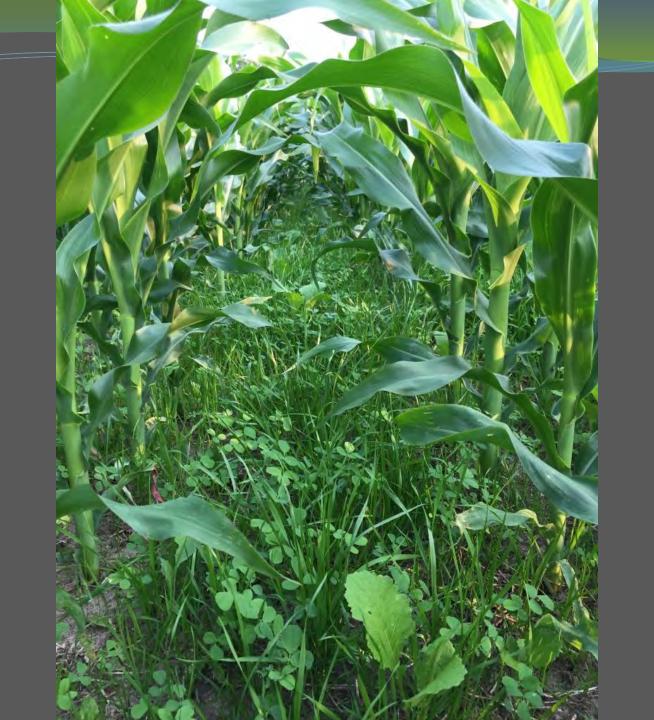




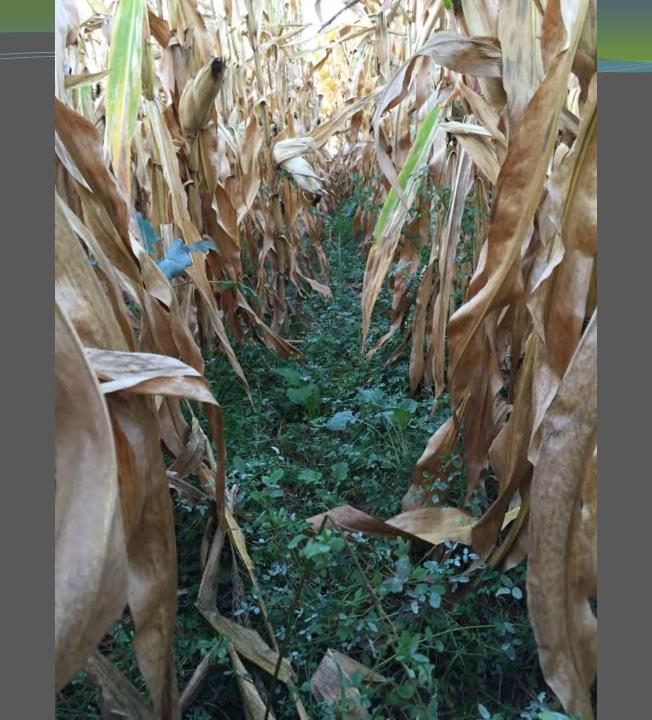














LESSONS LEARNED OVER YEARS

- 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 LEAFDROP?
- 2nd 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
 - 5-10lbs/ac OATS
 - 10-20lbs/ac FABA BEANS
 - 2-4lbs/ac VETCH (HAIRY OR WOOLYPOD)

\$10**-2**0/ac