



for a cleaner tomorrow



Switchgrass VS Winter Wheat

Ontario Biomass Producers Co-op



Wheat Straw

- ▶ If your farm operation is in need of straw
 - ▶ Is switchgrass a better alternative than winter wheat or spring cereals?
- ▶ Benefits of switchgrass
 - ▶ Guaranteed supply (it is a perennial, no risk of not getting winter wheat in)
 - ▶ Low risk crop with minimal inputs
 - ▶ Nitrogen only
 - ▶ No phosphorus or potash
 - ▶ No herbicides or fungicides
 - ▶ No crop insurance
 - ▶ Contra-seasonal harvest (more efficient use of baler and disk bines)

Winter Wheat 5 year average

CROP BUDGET

Crop	Fall Wheat
Yield/acre	85
Straw/lb	1500
Price/bus.	6.5
Price/Lb	0.07
Total/acre	658
Expenses	
Seed	70
Fertilizer applied	100
Herbicide	7
Fungicide	17
Field prep	
Planting no till	25
Spraying	16
Baling	14
Trucking Straw	11
Harvesting	40
Trucking Grain	18
Fall tillage	25
Drying	10
Cost of land	
Crop Insurance	7
Total/acre	360
Net per acre	297.5

Switchgrass 10 year average

Income	Switch Grass 10 year Projected Income									
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Switch Grass Yield	0	2	4	4	4	4	4	4	4	4
Spring Wheat Yield in Tonnes	1.5									
Price per tonne	238	154	154	154	154	154	154	154	154	154
Spring wheat straw	35									
Per acre Income	392	308	616	616	616	616	616	616	616	616
Expenses										
Wheat seed	60	0								
Switch Grass Seed	54									
Fertilizer applied	62	62	62	62	62	62	62	62	62	62
Herbicides	7	12								
Land Preparation	25									
Planting	20									
Spraying	8	8								
Harvesting	42	88	176	176	176	176	176	176	176	176
Storage Cost	0	10	20	20	20	20	20	20	20	20
Cost of Land (insert number)	0	0	0	0	0	0	0	0	0	0
Per acre Expenses	278	180	258	258	258	258	258	258	258	258
Net Income	114	128	358	358	358	358	358	358	358	358
10 year avg income per acre	310.60									

Spring Wheat Establishment



Switchgrass Underseeding



Switchgrass in mid July



Switchgrass in late August



Switchgrass fall cutting



Switchgrass over Wintering



Spring harvested bales



Review of switchgrass evolution in Ontario

- ▶ Managed to prove viability of growing switchgrass in Ontario:
 - ▶ In nine years of production we have worked out the basic Ag How-to's
 - ▶ Economically attractive with steady profitability
 - ▶ Low risk crop with minimal inputs and work required
 - ▶ Highly beneficial for our environment.
 - ▶ Clean water
 - ▶ Clean air
 - ▶ Erosion control
 - ▶ Improved soil health

Recent Progress and Accomplishments

- ▶ Improved startup economics with nurse crop
- ▶ Switchgrass has gained acceptance in the following markets:
 - ▶ Animal bedding
 - ▶ Mushroom substrate
 - ▶ Feed rations
- ▶ Progress with financial programs for producers through ACC
- ▶ Promising improved cultivars from REAP-Canada

RC Tecumseh at 3lbs



Ready for winter



Where are we heading to

- ▶ Expanded seed breeding program to accomplish:
 - ▶ Much improved yields
 - ▶ Better establishments with lower seed dormancy rate
 - ▶ Improved characteristics to match specific applications
- ▶ Switchgrass can become an attractive future rotation, improving soil health and improving yields of follow-up cash crops
- ▶ We need to expand acreage and with that OBPC membership base
- ▶ OBPC will assist in providing necessary education for future producers

What are our future needs

- ▶ With OBPC we have a province wide organization for biomass producers
- ▶ Short term we would like to see more farms with a modest switchgrass acreage
 - ▶ Become more proficient with minimal risks
 - ▶ Produce quality bedding for your own livestock
- ▶ Long term we need extensive switchgrass acreage to meet the needs of new biomass applications
 - ▶ Farmers with biomass experience will be ready for primetime!
 - ▶ New market possibility of up to 10,000 acres by 2018



Switchgrass is a native grass

An old crop with a new life



ONTARIO BIOMASS PRODUCERS CO-OPERATIVE INC.

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Thank you!

