

DOLLARS AND SENSE ABOUT GROWING HOPS

FINANCIAL DEMANDS

TIME DEMANDS

KEEPING THINGS IN SCALE

MANAGED ACRES

INCOME							
				YIELD	ACRES	PRICE	TOTAL
HOP SALES		\$ 286,550.00	COOPER S	1400	26	\$5.50	\$200,200.00
			COOPER N	1000	15.7	\$5.50	\$86,350.00
							\$286,550.00
EXPENSES							
		2018 PROJECTED EXPENSES					
PROPERTY TAXES		\$ 5,600.00					
UTILITIES		\$ 1,600.00					
INSURANCE		\$ 1,034.00					
OPERATIONAL EXPENSES (ANNUAL)							
FARMING MATERIALS							
CHEMICALS			#####				
HERBICIDES \$93.77/A		\$ 3,570.98					
FUNGICIDES \$352.91/A		\$ 9,744.26					
INSECTICIDES 15.75/A		\$ 393.08					
FERTILIZER \$230/A		\$ 9,430.00					
FOLIAR NUTRIENTS \$147.94/A		\$ 3,698.59					
SOIL TESTS		\$ 500.00					
COVER CROPS \$23/A		\$ 950.00					
COMPOST				\$ 66,837.91	\$ 1,670.95		
FUEL		\$ 5,000.00					
TOOLS AND SUPPLIES		\$ 600.00					
SANITATION		\$ 761.00					

RENTED MACHINERY EXPENSE						
STRINGING						
TWINE 30 BALES		\$305	\$	9,150.00		
FREIGHT \$40/BALE			\$	1,200.00		
LABOR \$300/A			\$	12,000.00		
TRAINING LABOR	\$240/A		\$	9,840.00		
GROWING LABOR	1280 HRS X \$25		\$	32,000.00		
HARVEST LABOR	\$450/A		\$	18,450.00		
HARVEST TRANSPORTATION AND EQUIPMENT	\$343/A		\$	14,063.00		
MANAGEMENT COST			\$	50,000.00		
				\$ 189,584.91		
				\$ 4,624.02	COST PER ACRE	

RENTED MACHINERY EXPENSE			\$	7,000.00		
STRINGING						
	TWINE	30 BALES	\$305	\$	3,355.00	
	FREIGHT	\$40/BALE		\$	320.00	
	LABOR	\$300/A		\$	3,300.00	
TRAINING LABOR	\$240/A			\$	2,530.00	
	1280 HRS					
GROWING LABOR	X \$25			\$	11,050.00	
HARVEST LABOR	\$450/A			\$	4,950.00	
HARVEST TRANSPORTATION AND EQUIPMENT	\$343/A			\$	3,773.00	
MANAGEMENT COST						
				\$	49,434.96	
					\$ 4,494.09	COST PER ACRE
PROJECTED INCOME					\$90,750.00	
PROJECTED EXPENSES				\$	49,434.96	
GROSS PROFIT					\$41,315.04	

DO IT YOURSELF!

		11 ACRES					
INCOME							
				YIELD	ACRES	PRICE	TOTAL
HOP SALES		\$ 90,750.00	CHUCKS	1500	11	\$5.50	\$90,750.00
			CHUCKS	1600	11	\$5.50	\$96,800.00
				1300	\$ 11.00	\$5.50	\$78,650.00
EXPENSES							
			2018 PROJECTED EXPENSES				
PROPERTY TAXES		\$ 1,500.00					
UTILITIES		\$ 1,700.00					
INSURANCE							
OPERATIONAL EXPENSES (ANNUAL)							
FARMING MATERIALS							
	CHEMICALS		\$ 6,713.96				
	HERBICIDES \$93.77/A	\$ 1,031.47					
	FUNGICIDES \$352.91/A	\$ 3,881.90					
	INSECTICIDES 15.75/A	\$ 173.25					
	FERTILIZER \$230/A	\$ 2,530.00					
	FOLIAR NUTRIENTS \$147.94/A	\$ 1,627.34					
	SOIL TESTS	\$ 540.00					
	COVER CROPS \$23/A	\$ 253.00					
	COMPOST						
	FUEL	\$ 550.00					
	TOOLS AND SUPPLIES						
	SANITATION						

RENTED MACHINERY EXPENSE						
STRINGING						
	TWINE	30 BALES	\$305	\$	3,355.00	
	FREIGHT	\$40/BALE		\$	320.00	
	LABOR	\$300/A		\$	3,300.00	
TRAINING LABOR		\$240/A		\$	2,530.00	
		1280 HRS				
GROWING LABOR		X \$25		\$	3,000.00	
HARVEST LABOR		\$450/A		\$	4,950.00	
HARVEST TRANSPORTATION AND EQUIPMENT		\$343/A		\$	3,773.00	
MANAGEMENT COST						
				\$	35,014.96	
				\$	3,183.18	COST PER ACRE
PROJECTED INCOME					\$90,750.00	
PROJECTED EXPENSES				\$	<u>35,014.96</u>	
GROSS PROFIT					\$55,735.04	

FERTILIZER OPTIONS

NUTRIENT REQUIREMENTS FOR HOPS						
TAKE PETIOLE SAMPLES AT	5.5 FT					
			1 FT BELOW WIRE			
APPLY IN FALL						
	ORGANIC MATTER					
	LIME AND POTASSIUM					
	SULFUR AND CALCIUM					
APPLY IN SPRING						
	ALL CHEALATES-	Mg B Cu Zn		Mn		
	K MAG					
12-Jun		BEGIN APPLICATION	OF 20 LBS K PER WEEK THROUGH DRIP			
		KTS	POTASSIUM THI PHOSPHATE			
	FALL OPTIONS					
MORGAN COMPOSTING		\$201/A		PELLETS AND COMPOST	2 TONS PELLETS	2 TONS COMPOST
OM	1427 LBS			OM	3500 LBS	\$115/T
N	167			N	110	
P-PHOS	161			P-PHOS	129	\$258/A
K- POTASH	85			K- POTASH	96	
CA	366			CA	176	
MG	32			MG	12	
S	41			S	9	
GYPSUM/POTASH						
GYPSUM	1 TON/A	\$40	TON	\$40	0-0-14	\$386 TON
20% CA 17% S					9% S	225 LBS/A
					4% Mg	\$42.75 /A
					setting on spreader 1.75	
POTASH/ HUMIC HD	195 LB/A	\$674	TON	\$ 66.30		
				\$106.30		

0-0--45	\$42.75		
9% S			
4% Mg			
MICRO MIX	\$57.37	\$459.00	TON
UREA ?		\$29	\$318.00 TON
N 28	<u>\$98.00</u>	\$267.00	TON
	\$198.12	\$227.12	

WEEKLY SPRAY COSTS

													25					
	FOWLER SOUTH			25 A	USE	410 GALS												
CURZATE	3.2 OZ	25		80	5 LBS			80 OZ	\$ 0.92	OZ	\$ 73.60							
BADGE	1 PT	25		25	3.125 GAL			3.25 G	\$ 4.85	PT	\$ 121.25						FOLIAR NUTRIENTS	\$ 3,698.56
IMPROVE	8 OZ/100				32 OZ			32 OZ	\$ 0.21	OZ	\$ 6.72							
GANTEC	2 OZ	25		50	50 OZ			50 OZ	\$ 3.81	OZ	\$ 190.50						FUNGICIDES	\$ 9,744.26
											\$ 392.07	\$ 15.68						
	FOWLER SOUTH			25 A	USE	410 GALS												
RALLY	4 OZ	25		100	100 OZ			100 OZ	\$ 3.05		\$ 305.00							
RIDOMIL	0.5 PT	25		12.5	12.5 PTS			12.5 PTS	\$106.48	PT	\$1,331.00							\$ 13,835.90
IMPROVE					32 OZ			32 OZ	\$ 0.21	OZ	13.32							
SYSTEM ZINC	1.5 QTS	25		37.5	9.375 GAL			9.375 G	\$ 40.00	G	\$ 375.00							
GANTEC	2 OZ	25		50	50 OZ			50 OZ	\$ 3.81		190.5							
											\$2,214.82	\$ 88.59						
	FOWLER SOUTH			25 A	***FILL TO 600 GALLONS													
PRISTINE	14 OZ	25		350	21.875 LBS			21.87 lbs	\$ 3.14	OZ	\$1,099.00							
SYSYTEM READY	1 QTS	25		25	25 QTS			3.75 G	\$ 10.00	QT	\$ 250.00							
AGRIMEC	3.2 OZ	25		80	80 OZ			80 OZ	\$ 2.72	OZ	\$ 217.60							
IMPROVE	12.8 OZ/100	12		153.6	1.5 GAL			1.5 G	\$ 0.21	OZ	\$ 32.26							
GANTEC	2 OZ	25		50	50 OZ			50 OZ	\$ 3.81		\$ 190.50							
											\$1,789.36	\$ 71.57						

- DON'T BE AFRAID TO LEASE OR RENT EQUIPMENT
- IT COSTS AT LEAST \$8000/YR TO OWN A TRACTOR
- IT COSTS AT LEAST \$3000/YR TO OWN A SPRAYER
- HIRE LABOR WHEN NECESSARY
- TWINING
- TRAINING
- HARVEST?
- TIMING IS VERY IMPORTANT! DON'T GET BEHIND.
- BE REALISTIC ABOUT WHAT YOU WILL RECEIVE FOR YOUR HOPS. MAKE YOUR BUDGET FIT THE INCOME SIDE OF THE EQUATION.
- NEVER SKIMP ON SPRAYING AND FERTILIZING. YOU NEED TO FEED THE BEAST!
- BUY MACHINERY THAT WILL ALWAYS INCREASE YOUR EFFICIENCY.

CHALLENGES AT THE BEGINNING

- YOU NEED TO INVEST IN TRELLIS, PLANTS, AND GROWING EXPENSES WHILE AT THE SAME TIME INVESTING IN HARVESTING AND PROCESSING EQUIPMENT.
- THERE IS USUALLY A 1 ½ YEAR LAG TIME BETWEEN PLANTING AND HARVESTING.
- YOU HAVE THE EXPENSE OF TWO GROWING SEASONS UNTIL YOU HARVEST.
- YOU HAVE TO PAY THE EXPENSE OF THE HARVEST AND PROCESSING ON TOP OF THE GROWING EXPENSE.
- AT LEAST A TWO YEAR LAG TIME UNTIL YOU GET PAID!

CONTINUOUS CHALLENGES

- MAKE SURE YOU SELL EVERYTHING YOU GROW! YOU CAN'T LEAVE 10-15% UNSOLD. THAT IS YOUR PROFIT MARGIN!
- MAKE SURE YOU WILL GET PAID!
- DON'T BE AFRAID TO TEAR OUT AND REPLACE VARIETIES.
- DON'T BE AFRAID TO NOT STRING CERTAIN VARIETIES IF THERE IS AN OVERSUPPLY.
- BE AWARE OF MARKET CHANGES AND TRENDS. BE CURRENT WITH YOUR VARIETY MIX.
- DON'T EXPECT BREWERS TO CONTRACT RIGHT AWAY. THEY NEED TO GAIN CONFIDENCE.

CONTRACT CONSIDERATIONS

- 20% DOWN
- 10% FOR NEXT 8 MONTHS
- BREWER CANNOT TAKE MORE THAN THEY HAVE PAID FOR.
- TRY AND GET THEM TO TAKE ALL OF THEIR HOPS BEFORE THE NEXT HARVEST.
- DON'T LET THEM CONTRACT TOO MUCH. YOU WILL GET STUCK WITH THE HOPS.
- IT'S BETTER TO HAVE MULTIPLE CUSTOMERS, THAN ONE OR TWO BIG CUSTOMERS.
- STORAGE COSTS ARE A BIG FACTOR. DON'T IGNORE THEM.

REFER TO HOP ENTERPRISE HANDOUT

- <https://www.usahops.org/growers/cost-of-production.html>
- YOU CAN FILL IN THIS BUDGET CREATED FROM USA HOPS
- [http://msue.anr.msu.edu/uploads/resources/pdfs/Estimated_Costs_of_Producing_Hops_in_Michigan_\(E3236\).pdf](http://msue.anr.msu.edu/uploads/resources/pdfs/Estimated_Costs_of_Producing_Hops_in_Michigan_(E3236).pdf)