COLLEGE OF AGRICULTURE AND LIFE SCIENCES
COOPERATIVE EXTENSION

An Introduction to the Small Acreage Specialty Cost Estimator

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United States Department of Agriculture
National Institute of Food and Agriculture

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Today's Topics

1) Preliminary Information
2) Introduction to the Program
3) The Spreadsheet
4) Wrap-up

The Underlying Idea of This Spreadsheet

The primary function of this program is to provide small acreage producers the ability to :

- Allocated fixed cost among crops based on amount of space used and the length of time.
- Calculates profitability of each crop as well as break even values
- Provide a Crop planner/scheduler for the operation

So what a crop costs depends on the square footage occupied and the number of weeks that space is used.

The following information is needed to use the spreadsheet.

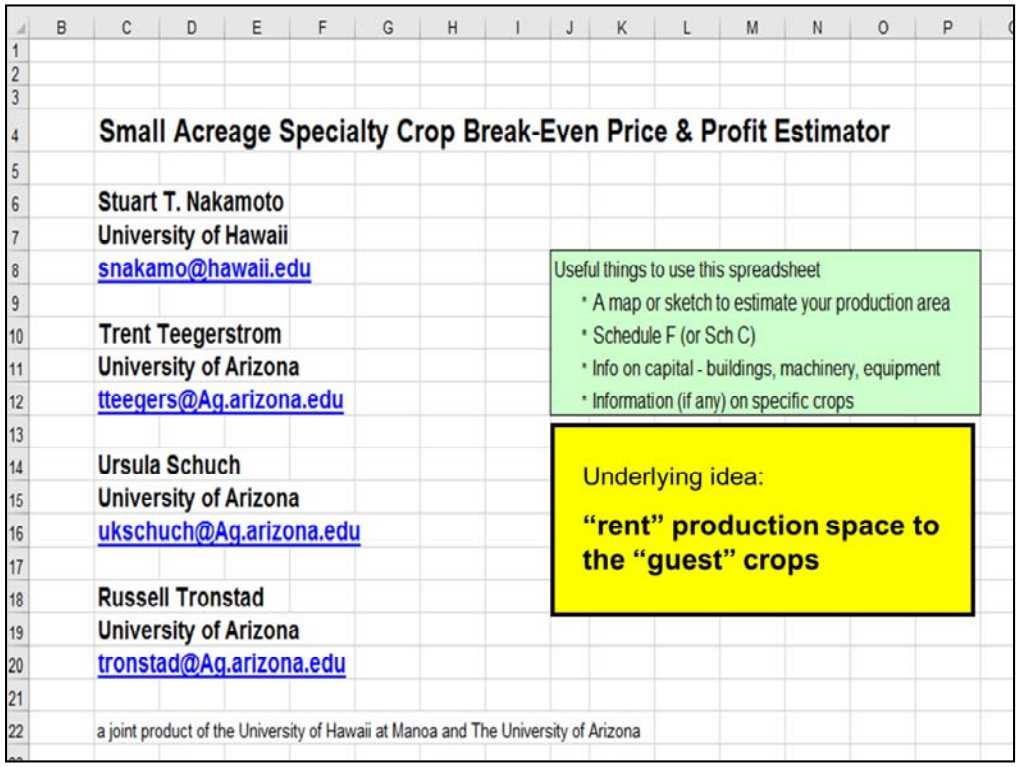
1. Map or diagram of your operation, showing all your production areas (Fields, Hoop Houses and Greenhouses).
2. Crop Records: Production and Financial
3. Schedule F or other tax form that shows your expenses (Optional).
4. Info on Capital Items- buildings, machinery, equipment
5. Your knowledge and/or any production records for specific products.

As with any other spreadsheet, the accuracy of the results will depend on the accuracy of the data going in. So if you use ballpark figures, you should treat results as ballpark figures even if the spreadsheet makes the numbers look very precise.

Compatibility Report for Small Acreage Specialty Crop Spreadsheet

The following features in this workbook are not supported by earlier versions of Excel. These features may be lost or degraded when opening this workbook in an earlier version of Excel or if you save this workbook in an earlier file format.

Significant loss of functionality	# of occurrences	Version
One or more functions in this workbook are not available in versions prior to Excel 2007. When recalculated in earlier versions, these functions will return a #NAME? error instead of their current results.	600	
	Crop Planning (3)'!K100:M199	Excel 97-2003
	Crop Planning (2)'!J97:L196	Excel 97-2003



Small Acreage Specialty Crop Break-Even Price & Profit Estimator

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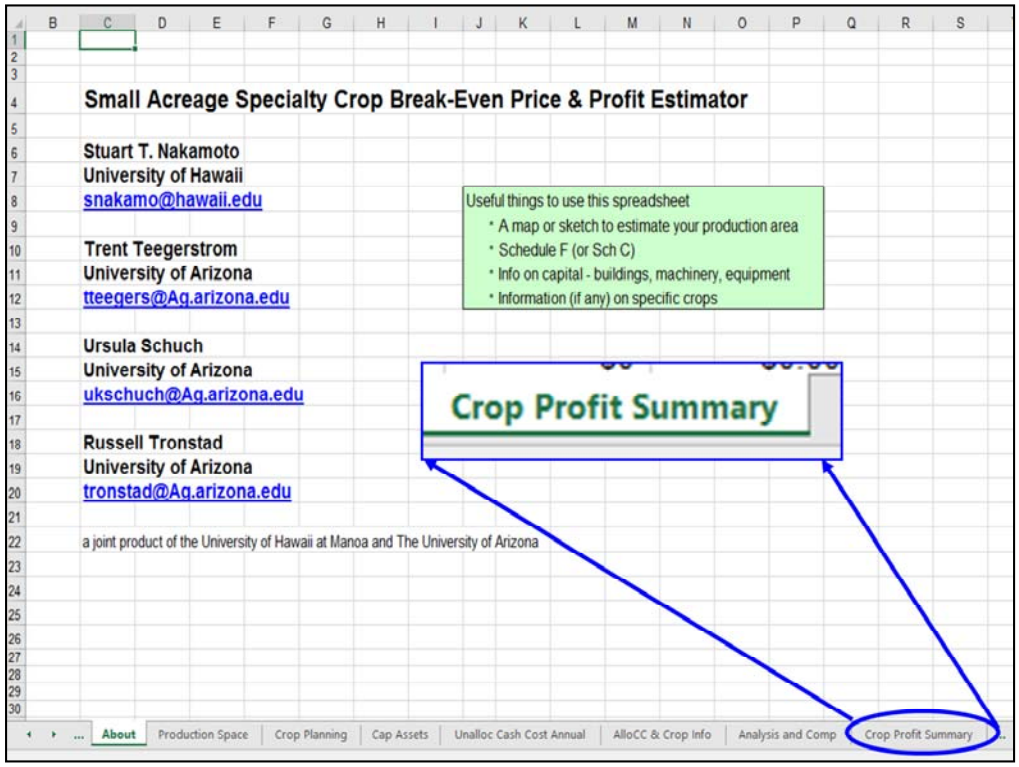
a joint product of the University of Hawaii at Manoa and The University of Arizona

Useful things to use this spreadsheet

- A map or sketch to estimate your production area
- Schedule F (or Sch C)
- Info on capital - buildings, machinery, equipment
- Information (if any) on specific crops

Underlying idea:

"rent" production space to the "guest" crops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Crop Profit Summary
About
Production Space
Crop Planning
Cap Assets
Unalloc Cash Cost Annual
AlloCC & Crop Info
Analysis and Comp
Crop Profit Summary

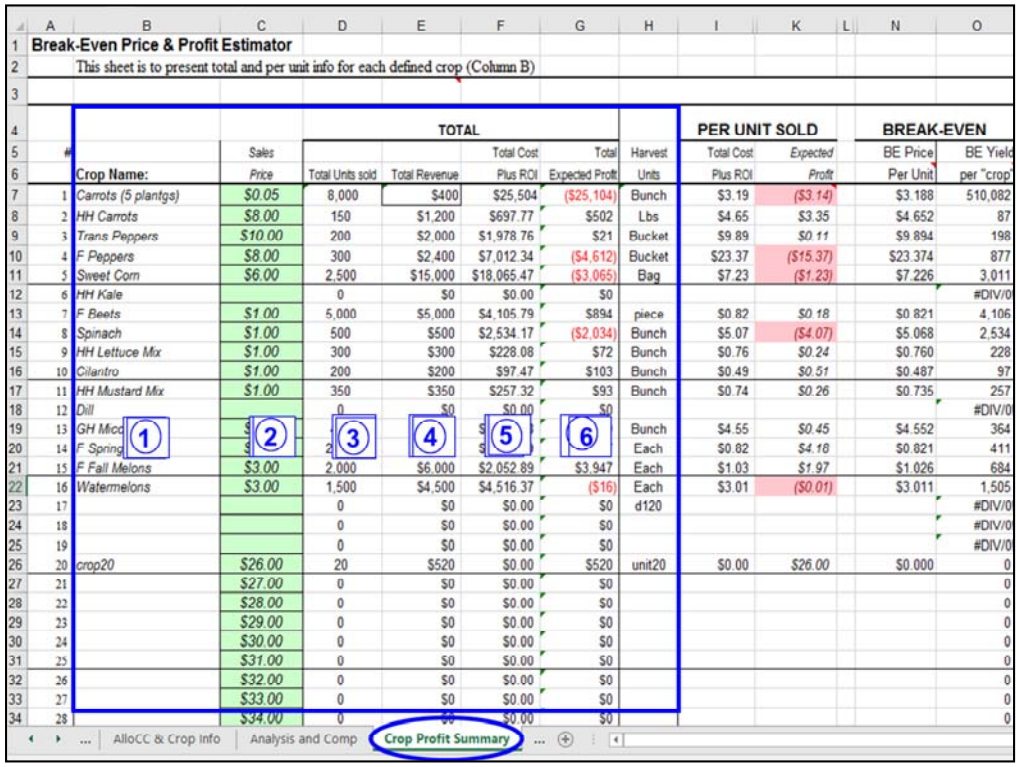
Crop Profit Summary

1) Start with the end in mind (one page summary)
   a) Look at your current sales price per crop
   b) Calculates total units sold per crop
   c) Calculates total returns per crop
   d) Calculates total cost plus ROI per crop & per unit sold
   e) Calculates expected profits per crop & per unit sold
   f) Calculates break-even price per crop & per unit sold
   g) Calculates break-even yield per crop

Break-even Analysis

Crops	Arugula	Kale	Chives	Spinach	Cilantro
Break Even Prices	$/kg	$/kg	$/kg	$/kg	$/kg
to Cover Growing Cost	6.49	1.29	5.76	2.65	5.82
to Cover Total Variable Cost	9.05	2.07	10.85	6.29	9.26
to Cover Ownership Cost	10.95	2.33	8.23	4.35	8.24
to Cover Total Cost	19.99	4.40	19.07	10.64	17.51

*Prices are for one high tunnel and based on harvested marketable yields
1 kg=2.2 pounds



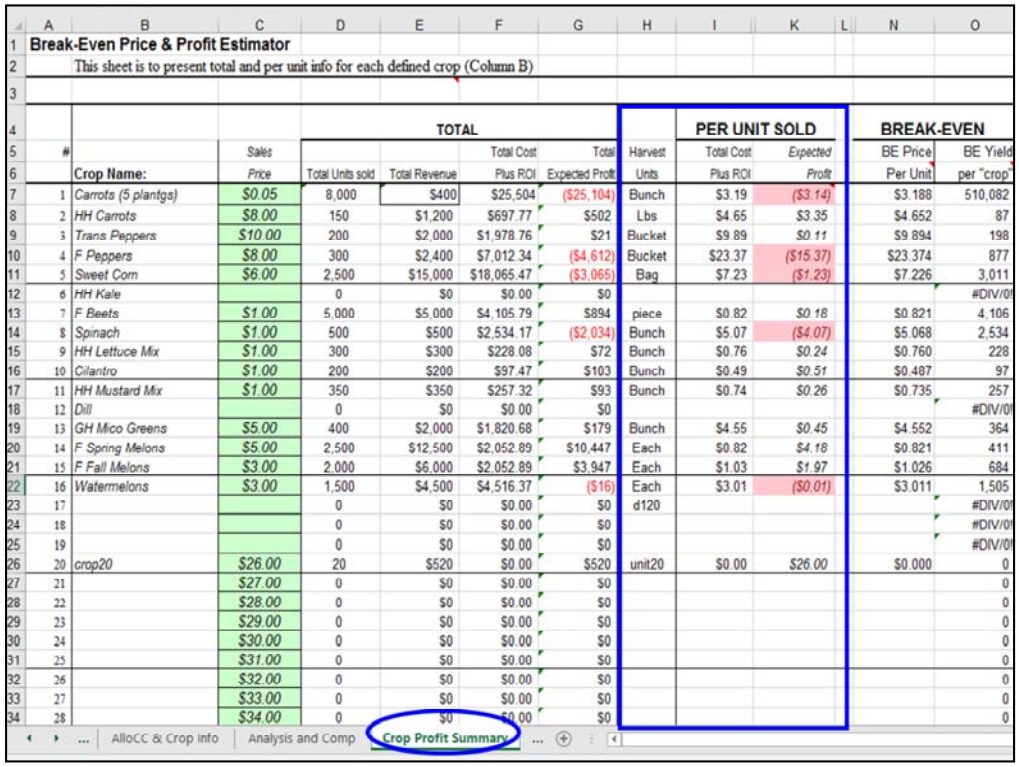
Break-Even Price & Profit Estimator

This sheet is to present total and per unit info for each defined crop (Column B)

#	Crop Name:	Sales Price	TOTAL: Total Units sold	TOTAL: Total Revenue	TOTAL: Total Cost Plus ROI	TOTAL: Total Expected Profit	Harvest Units	PER UNIT SOLD: Total Cost Plus ROI	PER UNIT SOLD: Expected Profit	BREAK-EVEN: BE Price Per Unit	BREAK-EVEN: BE Yield per "crop"
1	Carrots (5 plantgs)	$0.05	8,000	$400	$25,504	($25,104)	Bunch	$3.19	($3.14)	$3.188	510,082
2	HH Carrots	$8.00	150	$1,200	$697.77	$502	Lbs	$4.65	$3.35	$4.652	87
3	Trans Peppers	$10.00	200	$2,000	$1,978.76	$21	Bucket	$9.89	$0.11	$9.894	198
4	F Peppers	$8.00	300	$2,400	$7,012.34	($4,612)	Bucket	$23.37	($15.37)	$23.374	877
5	Sweet Corn	$6.00	2,500	$15,000	$18,065.47	($3,065)	Bag	$7.23	($1.23)	$7.226	3,011
6	HH Kale		0	$0	$0.00	$0					#DIV/0
7	F Beets	$1.00	5,000	$5,000	$4,105.79	$894	piece	$0.82	$0.18	$0.821	4,106
8	Spinach	$1.00	500	$500	$2,534.17	($2,034)	Bunch	$5.07	($4.07)	$5.068	2,534
9	HH Lettuce Mix	$1.00	300	$300	$228.08	$72	Bunch	$0.76	$0.24	$0.760	228
10	Cilantro	$1.00	200	$200	$97.47	$103	Bunch	$0.49	$0.51	$0.487	97
11	HH Mustard Mix	$1.00	350	$350	$257.32	$93	Bunch	$0.74	$0.26	$0.735	257
12	Dill		0	$0	$0.00	$0					#DIV/0
13	GH Mixed						Bunch	$4.55	$0.45	$4.552	364
14	F Spring		2				Each	$0.82	$4.18	$0.821	411
15	F Fall Melons	$3.00	2,000	$6,000	$2,052.89	$3,947	Each	$1.03	$1.97	$1.026	684
16	Watermelons	$3.00	1,500	$4,500	$4,516.37	($16)	Each	$3.01	($0.01)	$3.011	1,505
17			0	$0	$0.00	$0	d120				#DIV/0
18			0	$0	$0.00	$0					#DIV/0
19			0	$0	$0.00	$0					#DIV/0
20	crop20	$26.00	20	$520	$0.00	$520	unit20	$0.00	$26.00	$0.000	0
21		$27.00	0	$0	$0.00	$0					0
22		$28.00	0	$0	$0.00	$0					0
23		$29.00	0	$0	$0.00	$0					0
24		$30.00	0	$0	$0.00	$0					0
25		$31.00	0	$0	$0.00	$0					0
26		$32.00	0	$0	$0.00	$0					0
27		$33.00	0	$0	$0.00	$0					0
28		$34.00	0	$0	$0.00	$0					0

1 2 3 4 5 6

... AlloCC & Crop Info | Analysis and Comp | Crop Profit Summary ...



Break-Even Price & Profit Estimator

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12	Dill		0	$0	$0.00	$0					#DIV/0!
13	GH Mico Greens	$5.00	400	$2,000	$1,820.68	$179	Bunch	$4.55	$0.45	$4.552	364
14	F Spring Melons	$5.00	2,500	$12,500	$2,052.89	$10,447	Each	$0.82	$4.18	$0.821	411
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23		$29.00	0	$0	$0.00	$0					0
24		$30.00	0	$0	$0.00	$0					0
25		$31.00	0	$0	$0.00	$0					0
26		$32.00	0	$0	$0.00	$0					0
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28		$34.00	0	$0	$0.00	$0					0

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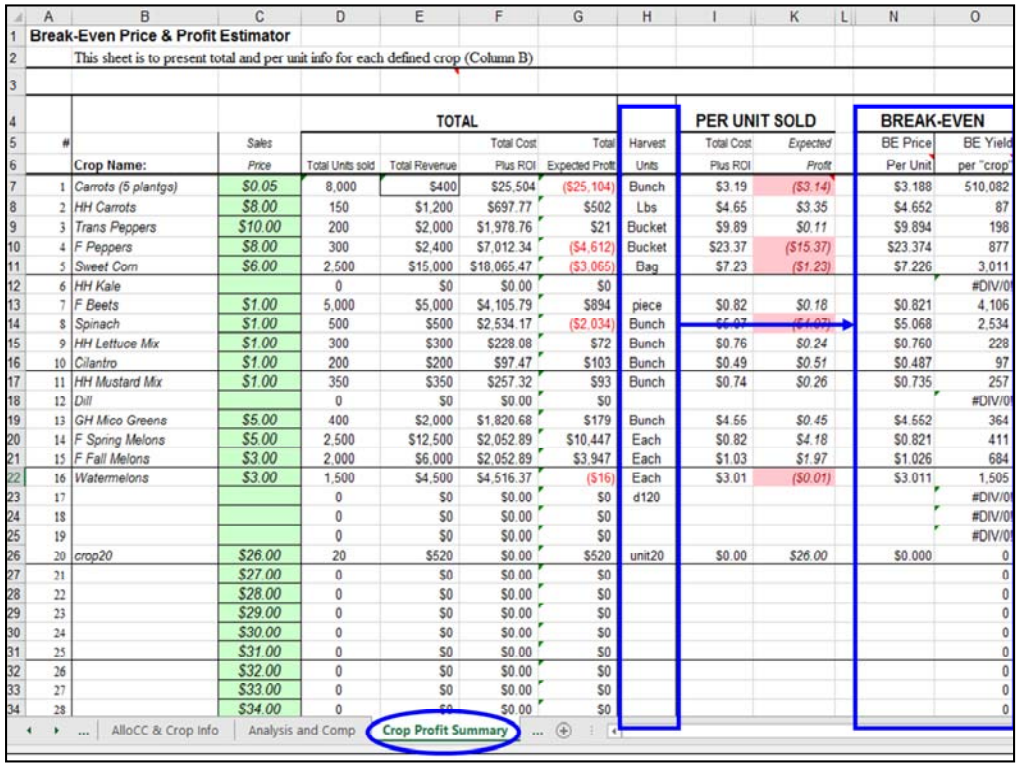

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27		$33.00	0	$0	$0.00	$0					0
28		$34.00	0	$0	$0.00	$0					0

... | AlloCC & Crop Info | Analysis and Comp | Crop Profit Summary | ...

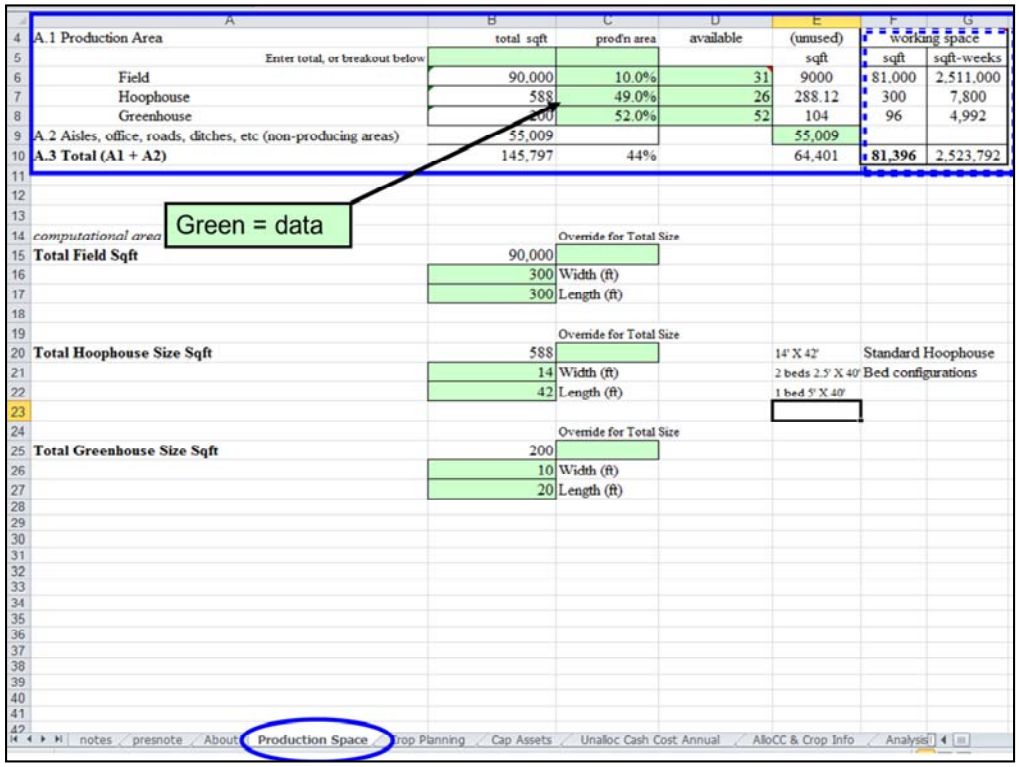
Production Space

1)Defining you growing space

a) Field
b) Hoop House
c) Greenhouse

2)Account of all open “non-production” space

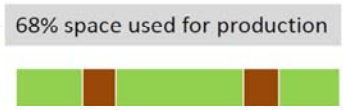
a) Aisles
b) Office
c) Roads
d) Ditches
e) Etc.

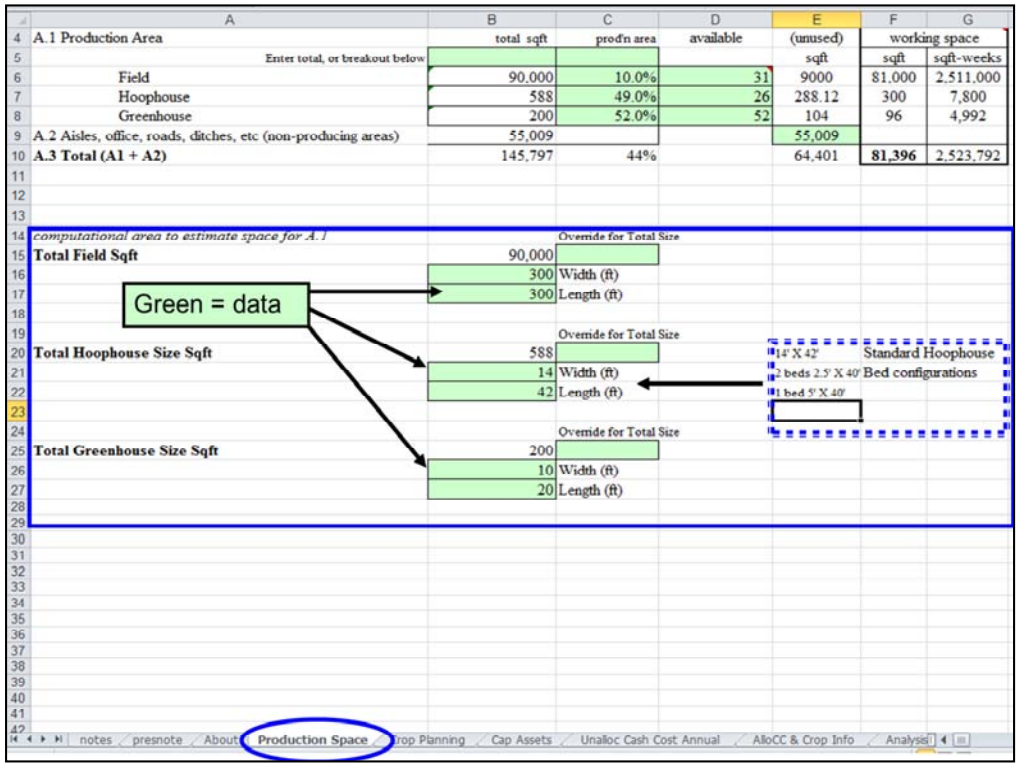


	A	B	C	D	E	F	G
4	A.1 Production Area	total sqft	prod'n area	available	(unused)	working space	
5	Enter total, or breakout below				sqft	sqft	sqft-weeks
6	Field	90,000	10.0%	31	9000	81,000	2,511,000
7	Hoophouse	588	49.0%	26	288.12	300	7,800
8	Greenhouse	200	52.0%	52	104	96	4,992
9	A.2 Aisles, office, roads, ditches, etc (non-producing areas)	55,009			55,009		
10	**A.3 Total (A1 + A2)**	145,797	44%		64,401	**81,396**	2,523,792
11							
12							
13							
14	*computational area*		Override for Total Size				
15	**Total Field Sqft**	90,000					
16		300	Width (ft)				
17		300	Length (ft)				
18							
19			Override for Total Size				
20	**Total Hoophouse Size Sqft**	588			14' X 42'	Standard Hoophouse	
21		14	Width (ft)		2 beds 2.5' X 40'	Bed configurations	
22		42	Length (ft)		1 bed 5' X 40'		
23							
24			Override for Total Size				
25	**Total Greenhouse Size Sqft**	200					
26		10	Width (ft)				
27		20	Length (ft)				
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							

Maximizing the use of space

- Yield per square foot pays for investment
- High tunnel 14 feet x 40 feet = 588 square feet
  2 beds 4' x 37.5' = 300 squ ft (51%)
- Production area with 2 beds 2.5', 1 bed 5'
  production area 10' x 40' = 400 squ ft (68%)




A
B
C
D
E
F
G
A.1 Production Area
total sqft
prod'n area
available
(unused)
working space
Enter total, or breakout below
sqft
sqft
sqft-weeks
Field
90,000
10.0%
31
9000
81,000
2,511,000
Hoophouse
588
49.0%
26
288.12
300
7,800
Greenhouse
200
52.0%
52
104
96
4,992
A.2 Aisles, office, roads, ditches, etc (non-producing areas)
55,009
55,009
A.3 Total (A1 + A2)
145,797
44%
64,401
81,396
2,523,792
computational area to estimate space for A.1
Override for Total Size
Total Field Sqft
90,000
300
Width (ft)
300
Length (ft)
Green = data
Override for Total Size
Total Hoophouse Size Sqft
588
14
Width (ft)
42
Length (ft)
14' X 42'
Standard Hoophouse
2 beds 2.5' X 40'
Bed configurations
1 bed 5' X 40'
Override for Total Size
Total Greenhouse Size Sqft
200
10
Width (ft)
20
Length (ft)
notes
presnote
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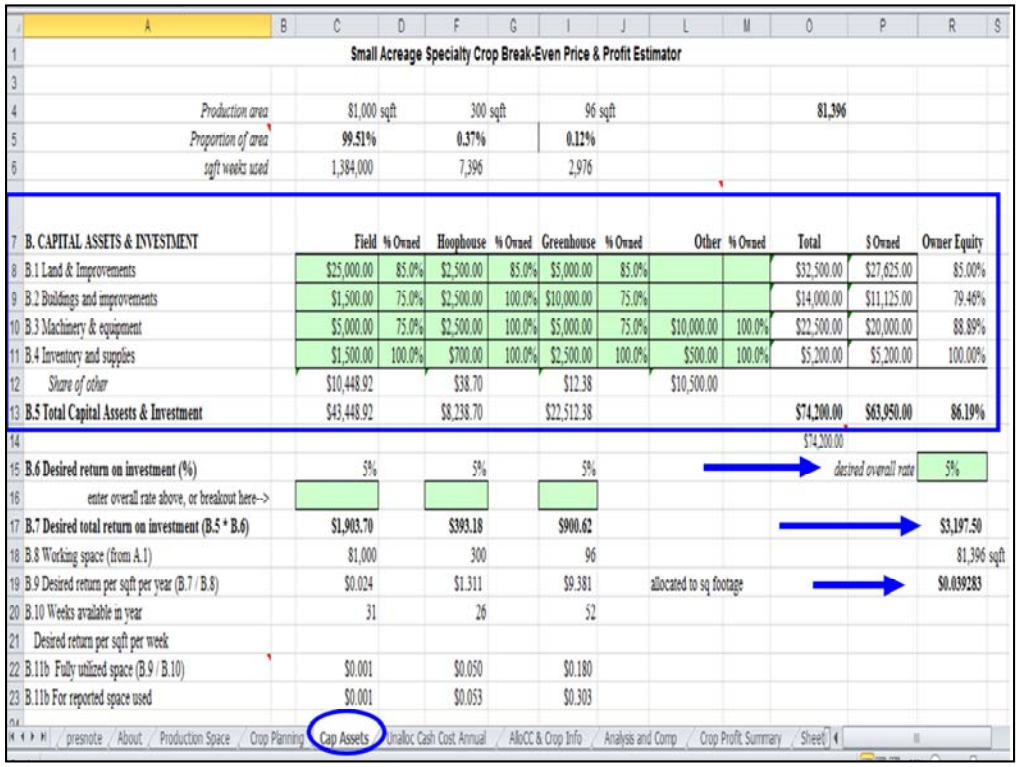
Capital Assets

1) Defining you assets & investments in the operation
   a) Land & Improvements
   b) Buildings & Improvements
   c) Machinery & Supplies
   d) Greenhouse

2) Determine your desired Return on Investment (ROI)
   a) Enter your total Percent (5%) or;
   b) Break in out over production systems, Fields, HH, GH



Small Acreage Specialty Crop Break-Even Price & Profit Estimator

	Production area	81,000 sqft		300 sqft		96 sqft				81,396			
	Proportion of area	**99.51%**		**0.37%**		**0.12%**							
	sqft weeks used	1,384,000		7,396		2,976							
	B. CAPITAL ASSETS & INVESTMENT	**Field**	**% Owned**	**Hoophouse**	**% Owned**	**Greenhouse**	**% Owned**	**Other**	**% Owned**	**Total**	**$ Owned**	**Owner Equity**	
	B.1 Land & Improvements	$25,000.00	85.0%	$2,500.00	85.0%	$5,000.00	85.0%			$32,500.00	$27,625.00	85.00%	
	B.2 Buildings and improvements	$1,500.00	75.0%	$2,500.00	100.0%	$10,000.00	75.0%			$14,000.00	$11,125.00	79.46%	
	B.3 Machinery & equipment	$5,000.00	75.0%	$2,500.00	100.0%	$5,000.00	75.0%	$10,000.00	100.0%	$22,500.00	$20,000.00	88.89%	
	B.4 Inventory and supplies	$1,500.00	100.0%	$700.00	100.0%	$2,500.00	100.0%	$500.00	100.0%	$5,200.00	$5,200.00	100.00%	
	Share of other	$10,448.92		$38.70		$12.38		$10,500.00					
	B.5 Total Capital Assests & Investment	$43,448.92		$8,238.70		$22,512.38				**$74,200.00**	**$63,950.00**	**86.19%**	
										$74,200.00			
	B.6 Desired return on investment (%)	5%		5%		5%					*desired overall rate*	5%	
	enter overall rate above, or breakout here-->												
	B.7 Desired total return on investment (B.5 * B.6)	**$1,903.70**		**$393.18**		**$900.62**						**$3,197.50**	
	B.8 Working space (from A.1)	81,000		300		96						81,396 sqft	
	B.9 Desired return per sqft per year (B.7 / B.8)	$0.024		$1.311		$9.381		allocated to sq footage				**$0.039283**	
	B.10 Weeks available in year	31		26		52							
	Desired return per sqft per week												
	B.11b Fully utilized space (B.9 / B.10)	$0.001		$0.050		$0.180							
	B.11b For reported space used	$0.001		$0.053		$0.303							

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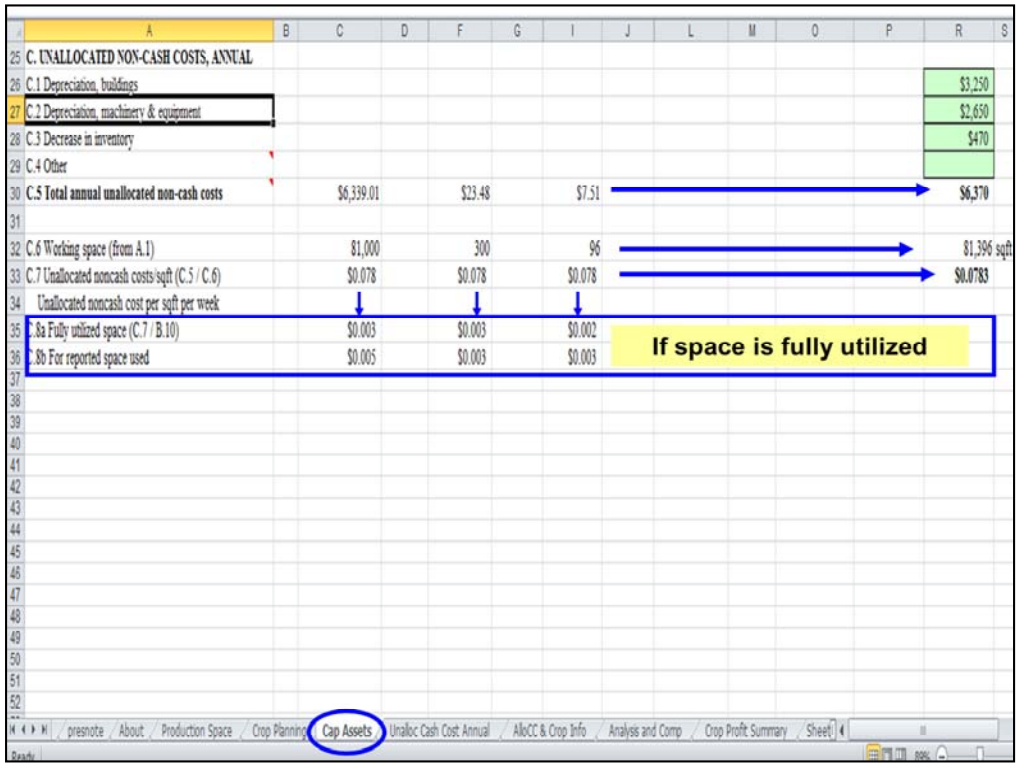
Unallocated Non-Cash Cost

1) Don't forget about your unallocated non-cash cost in the operation
   a) Depreciation on Buildings
   b) Depreciation on Machinery & Equipment
   c) Decrease in Inventory


C. UNALLOCATED NON-CASH COSTS, ANNUAL
C.1 Depreciation, buildings
C.2 Depreciation, machinery & equipment
C.3 Decrease in inventory
C.4 Other
C.5 Total annual unallocated non-cash costs
$6,339.01
$23.48
$7.51
$3,250
$2,650
$470
$6,370
C.6 Working space (from A.1)
81,000
300
96
81,396 sqft
C.7 Unallocated noncash costs/sqft (C.5 / C.6)
$0.078
$0.078
$0.078
$0.0783
Unallocated noncash cost per sqft per week
C.8a Fully utilized space (C.7 / B.10)
$0.003
$0.003
$0.002
C.8b For reported space used
$0.005
$0.003
$0.003
If space is fully utilized
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Crop Planning

1)Crop Planning Needs

a) Map of operation
b) List of crops to be grown
c) Space used per crop: (length X width in feet, total sqft.)
d) Expected prices per crop
e) How crop will be sold: (bags, lbs., bunches, buckets, each)

Crop Planning:

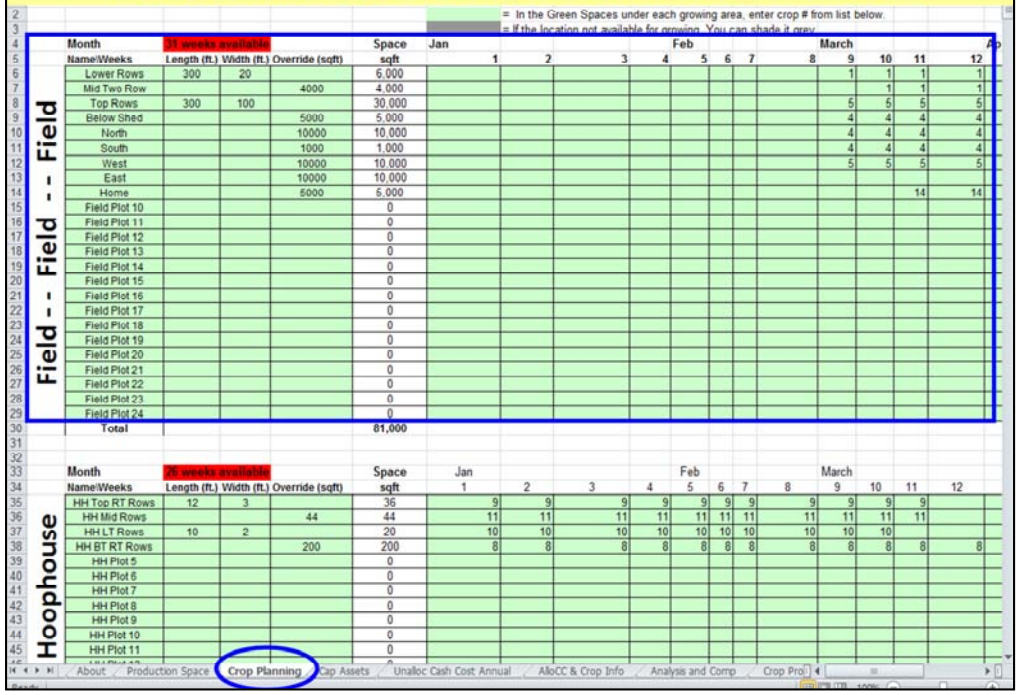
1)Entering your information part A of “Crop Planning” (Top of the Sheet)

a) Name the fields/plots/benched (descriptive names)

b) Input the size of the fields/plots/benched (Length X Width) or enter Override

a) Once all name and sizes are set mover to part B of the “Crop Planning” (Bottom part of the sheet)

Part A of the Crop Planning Sheet



= In the Green Spaces under each growing area, enter crop # from list below.
= If the location not available for growing. You can shade it grey

Field - - Field - - Field

Month	31 weeks available			Space	Jan							Feb				March				Ap
Name\Weeks	Length (ft.)	Width (ft.)	Override (sqft)	sqft	1	2	3	4	5	6	7	8	9	10	11	12				
Lower Rows	300	20		6,000									1	1	1	1				
Mid Two Row			4000	4,000										1	1	1				
Top Rows	300	100		30,000									5	5	5	5				
Below Shed			5000	5,000									4	4	4	4				
North			10000	10,000									4	4	4	4				
South			1000	1,000									4	4	4	4				
West			10000	10,000									5	5	5	5				
East			10000	10,000																
Home			5000	5,000											14	14				
Field Plot 10				0																
Field Plot 11				0																
Field Plot 12				0																
Field Plot 13				0																
Field Plot 14				0																
Field Plot 15				0																
Field Plot 16				0																
Field Plot 17				0																
Field Plot 18				0																
Field Plot 19				0																
Field Plot 20				0																
Field Plot 21				0																
Field Plot 22				0																
Field Plot 23				0																
Field Plot 24				0																
Total				81,000																

Hoophouse

Month	26 weeks available			Space	Jan				Feb				March			
Name\Weeks	Length (ft.)	Width (ft.)	Override (sqft)	sqft	1	2	3	4	5	6	7	8	9	10	11	12
HH Top RT Rows	12	3		36	9	9	9	9	9	9	9	9	9	9	9	
HH Mid Rows			44	44	11	11	11	11	11	11	11	11	11	11	11	
HH LT Rows	10	2		20	10	10	10	10	10	10	10	10	10	10		
HH BT RT Rows			200	200	8	8	8	8	8	8	8	8	8	8	8	8
HH Plot 5				0												
HH Plot 6				0												
HH Plot 7				0												
HH Plot 8				0												
HH Plot 9				0												
HH Plot 10				0												
HH Plot 11				0												

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Crop Planning:

1)Entering your information part B of “Crop Planning”

a)Name of crops to be grown (descriptive items)

b)Decide where they will be grown (location)

i.1 = Field

ii.2 = Hoophouse

iii.3 = Greenhouse

c)Define the unit of measure the crop will be sold in;

i.Bunches

ii.Pounds, Ounces

iii.Bags

iv.Pieces

v.Each

d) Return to part A of the Crop Planning sheet.

Part B of the Crop Planning Sheet

99	Part B	Crop Name	Location: 1=Field, 2=Hoophouse, 3=Greenhouse	Units of Measure Sold	Total yield (units harvested) for all plots
100	Part B	Crop Name	Loc	Unit	Total Yield
101	1	Carrots (5 plantgs)	1	Bunch	10000
102	2	HH Carrots	2	Lbs	150
103	3	Trans Peppers	3	Bucket	200
104	4	F Peppers	1	Bucket	300
105	5	Sweet Corn	1	Bag	2500
106	6	HH Kale	2		
107	7	F Beets	1	piece	5000
108	8	Spinach	2	Bunch	500
109	9	HH Lettuce Mix	2	Bunch	300
110	10	Cilantro	2	Bunch	200
111	11	HH Mustard Mix	2	Bunch	350
112	12	Dill			
113	13	GH Mico Greens	3	Bunch	400
114	14	F Spring Melons	1	Each	2500
115	15	F Fall Melons	1	Each	2000
116	16	Watermelons	1	Each	1500
117	17			d120	
118	18				
119	19				
120	20				
121	21				
122	22				
123	23				
124	24				
125	25				
126	26				

Enter crop name

Enter location where crop is grown

Enter sale unit

Yields (enter when harvested)

Crop Planning

1)Entering your information part A of “Crop Planning”

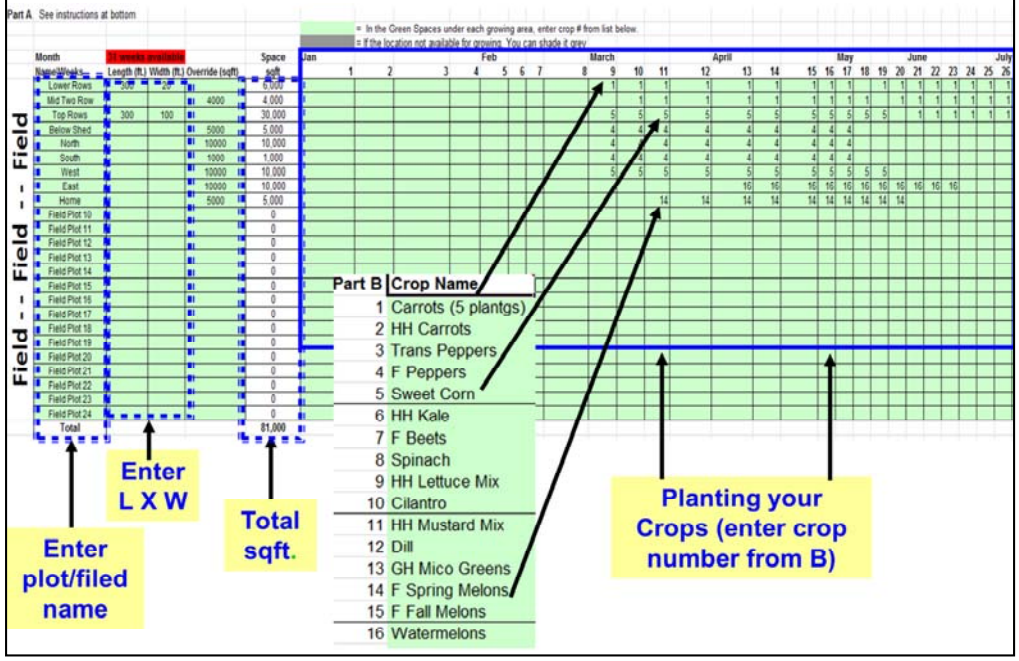
a) Start planting you crops using the crop numbers defined in part B for each month/week the crop is grown.

b) Enter crop number in each week that the crop is grown for each of the fields/plots/benches.

c) For more than one planting of the same crop in the same fields/plots/benches, allow for at lease one week between plantings on the sheet

d) See example

Part A of the Crop Planning Sheet



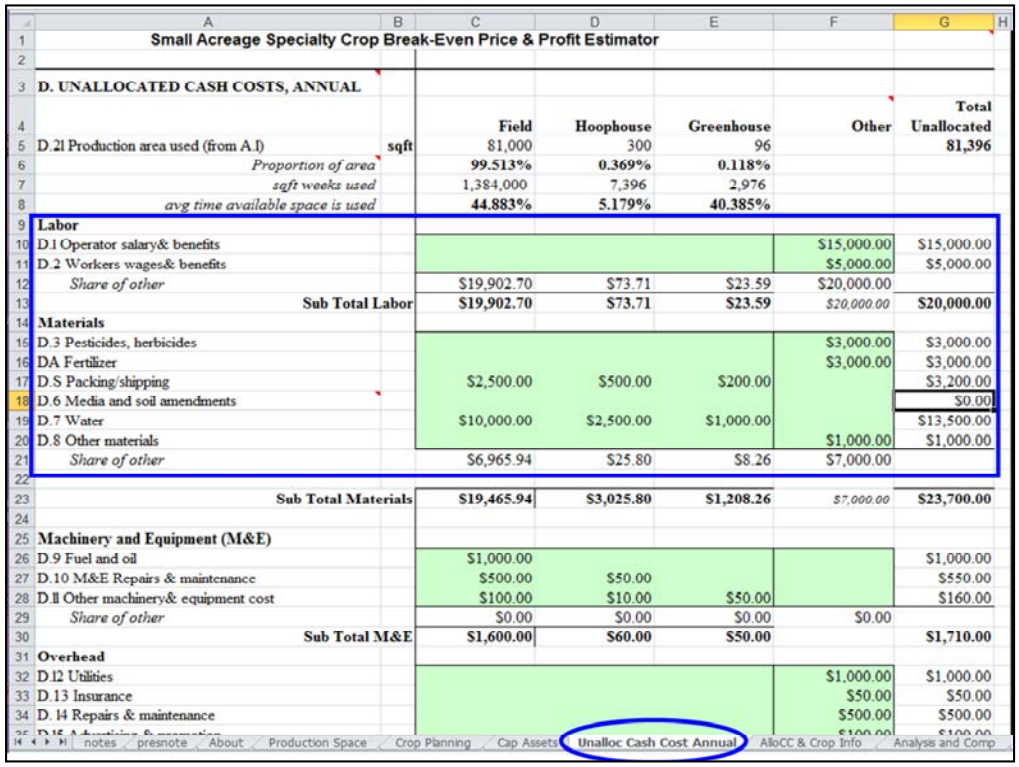
Unallocated Cash Expenses

1)Entering your Unallocated Cash Expenses

a) Labor
b) Materials
c) Machinery & Equipment
d) Overhead

2)Determine if expenses can be specific to production area

a) Enter the expense amount for each production systems, Fields, HH, GH



	A	B	C	D	E	F	G
1	**Small Acreage Specialty Crop Break-Even Price & Profit Estimator**						
2							
3	**D. UNALLOCATED CASH COSTS, ANNUAL**						
4			**Field**	**Hoophouse**	**Greenhouse**	**Other**	**Total Unallocated**
5	D.2l Production area used (from A.I)	**sqft**	81,000	300	96		**81,396**
6	*Proportion of area*		**99.513%**	**0.369%**	**0.118%**		
7	*sqft weeks used*		1,384,000	7,396	2,976		
8	*avg time available space is used*		**44.883%**	**5.179%**	**40.385%**		
9	**Labor**						
10	D.1 Operator salary& benefits					$15,000.00	$15,000.00
11	D.2 Workers wages& benefits					$5,000.00	$5,000.00
12	*Share of other*		$19,902.70	$73.71	$23.59	$20,000.00	
13	**Sub Total Labor**		**$19,902.70**	**$73.71**	**$23.59**	*$20,000.00*	**$20,000.00**
14	**Materials**						
15	D.3 Pesticides, herbicides					$3,000.00	$3,000.00
16	DA Fertilizer					$3,000.00	$3,000.00
17	D.S Packing/shipping		$2,500.00	$500.00	$200.00		$3,200.00
18	D.6 Media and soil amendments						$0.00
19	D.7 Water		$10,000.00	$2,500.00	$1,000.00		$13,500.00
20	D.8 Other materials					$1,000.00	$1,000.00
21	*Share of other*		$6,965.94	$25.80	$8.26	$7,000.00	
22							
23	**Sub Total Materials**		**$19,465.94**	**$3,025.80**	**$1,208.26**	*$7,000.00*	**$23,700.00**
24							
25	**Machinery and Equipment (M&E)**						
26	D.9 Fuel and oil		$1,000.00				$1,000.00
27	D.10 M&E Repairs & maintenance		$500.00	$50.00			$550.00
28	D.ll Other machinery& equipment cost		$100.00	$10.00	$50.00		$160.00
29	*Share of other*		$0.00	$0.00	$0.00	$0.00	
30	**Sub Total M&E**		**$1,600.00**	**$60.00**	**$50.00**		**$1,710.00**
31	**Overhead**						
32	D.l2 Utilities					$1,000.00	$1,000.00
33	D.13 Insurance					$50.00	$50.00
34	D. l4 Repairs & maintenance					$500.00	$500.00
35	D.15 Advertising & promotion					$100.00	$100.00

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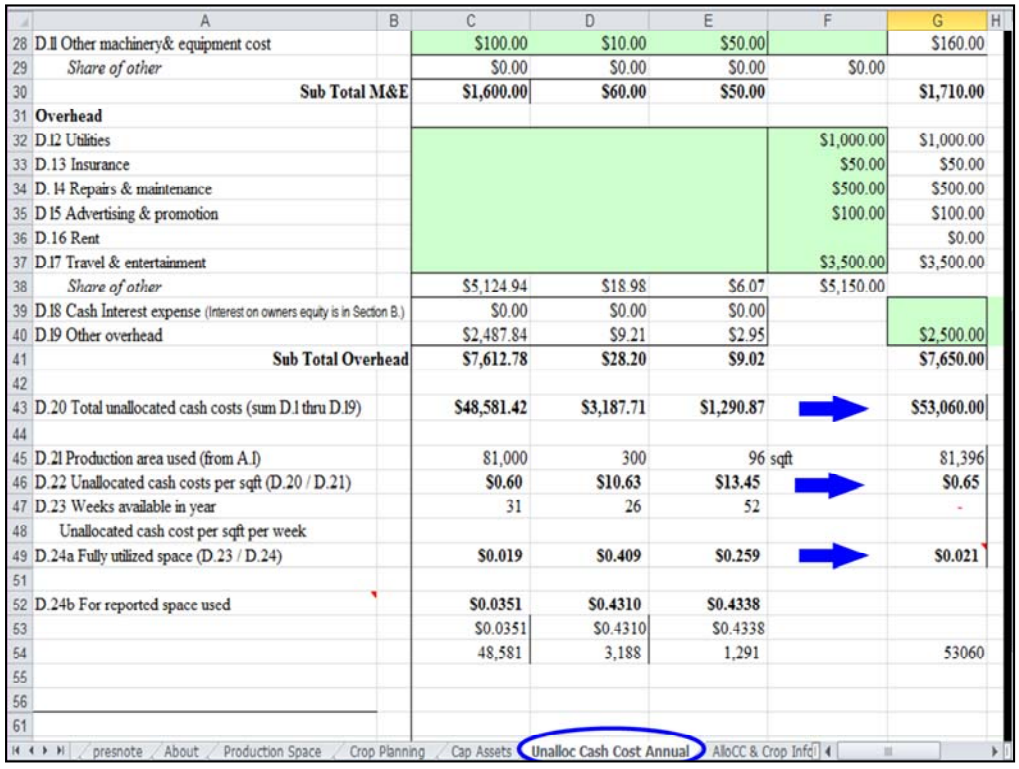

	A	B	C	D	E	F	G	H
28	D.11 Other machinery& equipment cost		$100.00	$10.00	$50.00		$160.00	
29	*Share of other*		$0.00	$0.00	$0.00	$0.00		
30	**Sub Total M&E**		**$1,600.00**	**$60.00**	**$50.00**		**$1,710.00**	
31	**Overhead**							
32	D.12 Utilities					$1,000.00	$1,000.00	
33	D.13 Insurance					$50.00	$50.00	
34	D. 14 Repairs & maintenance					$500.00	$500.00	
35	D.15 Advertising & promotion					$100.00	$100.00	
36	D.16 Rent						$0.00	
37	D.17 Travel & entertainment					$3,500.00	$3,500.00	
38	*Share of other*		$5,124.94	$18.98	$6.07	$5,150.00		
39	D.18 Cash Interest expense (Interest on owners equity is in Section B.)		$0.00	$0.00	$0.00			
40	D.19 Other overhead		$2,487.84	$9.21	$2.95		$2,500.00	
41	**Sub Total Overhead**		**$7,612.78**	**$28.20**	**$9.02**		**$7,650.00**	
42								
43	D.20 Total unallocated cash costs (sum D.1 thru D.19)		**$48,581.42**	**$3,187.71**	**$1,290.87**		**$53,060.00**	
44								
45	D.21 Production area used (from A.1)		81,000	300	96	sqft	81,396	
46	D.22 Unallocated cash costs per sqft (D.20 / D.21)		**$0.60**	**$10.63**	**$13.45**		**$0.65**	
47	D.23 Weeks available in year		31	26	52		-	
48	Unallocated cash cost per sqft per week							
49	D.24a Fully utilized space (D.23 / D.24)		**$0.019**	**$0.409**	**$0.259**		**$0.021**	
51								
52	D.24b For reported space used		**$0.0351**	**$0.4310**	**$0.4338**			
53			$0.0351	$0.4310	$0.4338			
54			48,581	3,188	1,291		53060	
55								
56								
61								

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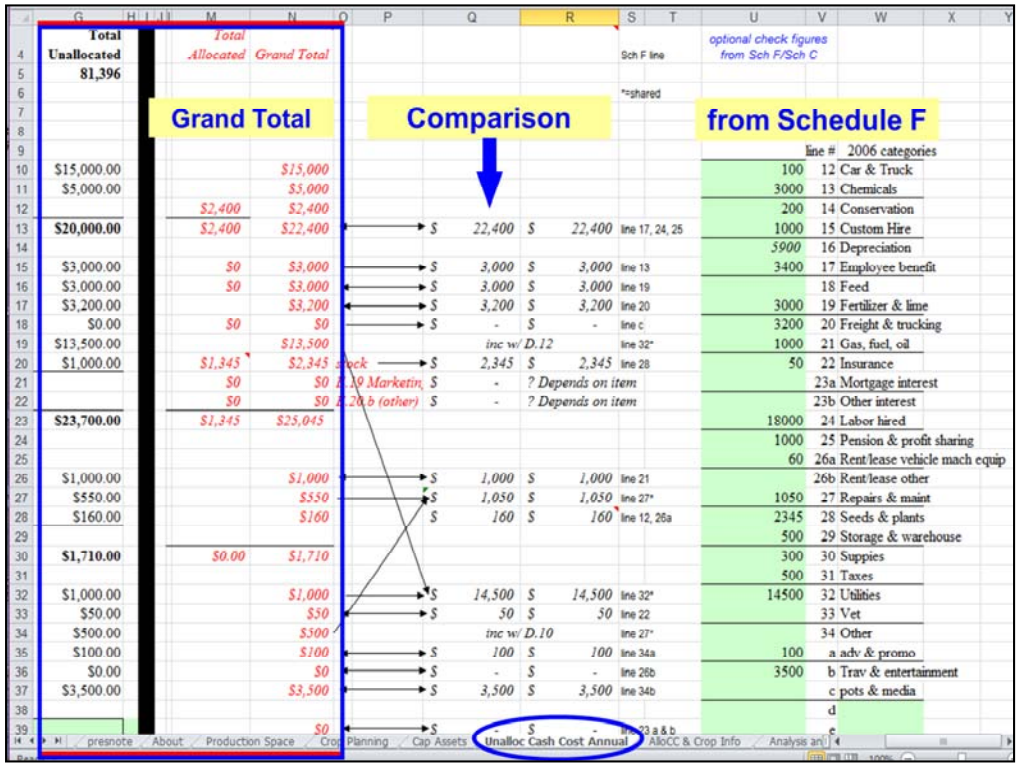
Unallocated Cash Expenses

1) Entering your Unallocated Cash Expenses using a Schedule F
   a) Labor
   b) Materials
   c) Machinery & Equipment
   d) Overhead

2) Can compare Schedule F vs your entry from another system, watch for double counting


Grand Total
Comparison
from Schedule F
Total Unallocated
81,396
Total Allocated
Grand Total
optional check figures from Sch F/Sch C
Sch F line
*=shared
line # 2006 categories
$15,000.00 $15,000 100 12 Car & Truck
$5,000.00 $5,000 3000 13 Chemicals
$2,400 $2,400 200 14 Conservation
$20,000.00 $2,400 $22,400 $ 22,400 $ 22,400 line 17, 24, 25 1000 15 Custom Hire
5900 16 Depreciation
$3,000.00 $0 $3,000 $ 3,000 $ 3,000 line 13 3400 17 Employee benefit
$3,000.00 $0 $3,000 $ 3,000 $ 3,000 line 19 18 Feed
$3,200.00 $3,200 $ 3,200 $ 3,200 line 20 3000 19 Fertilizer & lime
$0.00 $0 $0 $ - $ - line c 3200 20 Freight & trucking
$13,500.00 $13,500 inc w/ D.12 line 32* 1000 21 Gas, fuel, oil
$1,000.00 $1,345 $2,345 $ 2,345 $ 2,345 line 28 50 22 Insurance
$0 $0 $ - ? Depends on item 23a Mortgage interest
$0 $0 $ - ? Depends on item 23b Other interest
$23,700.00 $1,345 $25,045 18000 24 Labor hired
1000 25 Pension & profit sharing
60 26a Rent/lease vehicle mach equip
$1,000.00 $1,000 $ 1,000 $ 1,000 line 21 26b Rent/lease other
$550.00 $550 $ 1,050 $ 1,050 line 27* 1050 27 Repairs & maint
$160.00 $160 $ 160 $ 160 line 12, 26a 2345 28 Seeds & plants
500 29 Storage & warehouse
$1,710.00 $0.00 $1,710 300 30 Supplies
500 31 Taxes
$1,000.00 $1,000 $ 14,500 $ 14,500 line 32* 14500 32 Utilities
$50.00 $50 $ 50 $ 50 line 22 33 Vet
$500.00 $500 inc w/ D.10 line 27* 34 Other
$100.00 $100 $ 100 $ 100 line 34a 100 a adv & promo
$0.00 $0 $ - $ - line 26b 3500 b Trav & entertainment
$3,500.00 $3,500 $ 3,500 $ 3,500 line 34b c pots & media
d
$0 $ - $ - 23 a & b e
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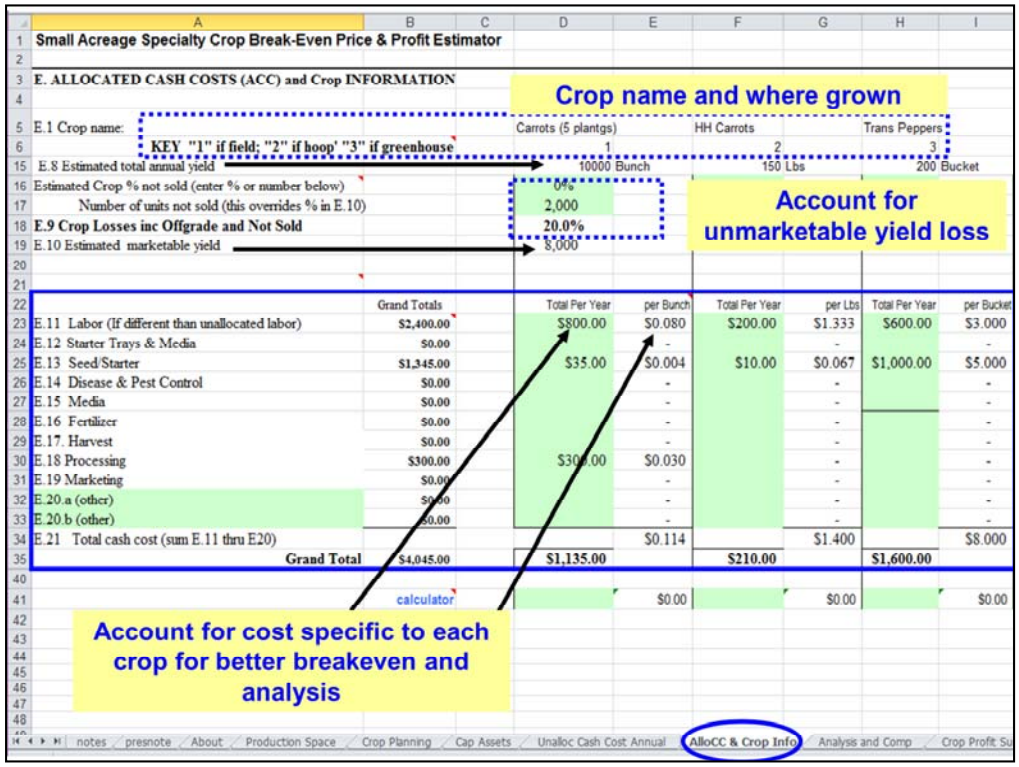
Getting Started:

1)If specific expenses are know for individual crops enter them on the “Allocated Cost Sheet”

a) Labor (specific to crop: carrots harvest, transplants)
b) Materials (transplants trays, boxes, etc.)
c) Machinery & Equipment
d) Overhead

2)Watch for double counting. If you have already accounted for the cost on the unallocated sheet, you will need to go back and reduce the appropriate item


Small Acreage Specialty Crop Break-Even Price & Profit Estimator
E. ALLOCATED CASH COSTS (ACC) and Crop INFORMATION
Crop name and where grown
E.1 Crop name:
Carrots (5 plantgs)
HH Carrots
Trans Peppers
KEY "1" if field; "2" if hoop' "3" if greenhouse
1
2
3
E.8 Estimated total annual yield
10000 Bunch
150 Lbs
200 Bucket
Estimated Crop % not sold (enter % or number below)
0%
Number of units not sold (this overrides % in E.10)
2,000
E.9 Crop Losses inc Offgrade and Not Sold
20.0%
Account for unmarketable yield loss
E.10 Estimated marketable yield
8,000
Grand Totals
Total Per Year
per Bunch
Total Per Year
per Lbs
Total Per Year
per Bucket
E.11 Labor (If different than unallocated labor)
$2,400.00
$800.00
$0.080
$200.00
$1.333
$600.00
$3.000
E.12 Starter Trays & Media
$0.00
E.13 Seed/Starter
$1,345.00
$35.00
$0.004
$10.00
$0.067
$1,000.00
$5.000
E.14 Disease & Pest Control
$0.00
E.15 Media
$0.00
E.16 Fertilizer
$0.00
E.17. Harvest
$0.00
E.18 Processing
$300.00
$300.00
$0.030
E.19 Marketing
$0.00
E.20.a (other)
$0.00
E.20.b (other)
$0.00
E.21 Total cash cost (sum E.11 thru E20)
$0.114
$1.400
$8.000
Grand Total
$4,045.00
$1,135.00
$210.00
$1,600.00
calculator
$0.00
$0.00
$0.00
Account for cost specific to each crop for better breakeven and analysis
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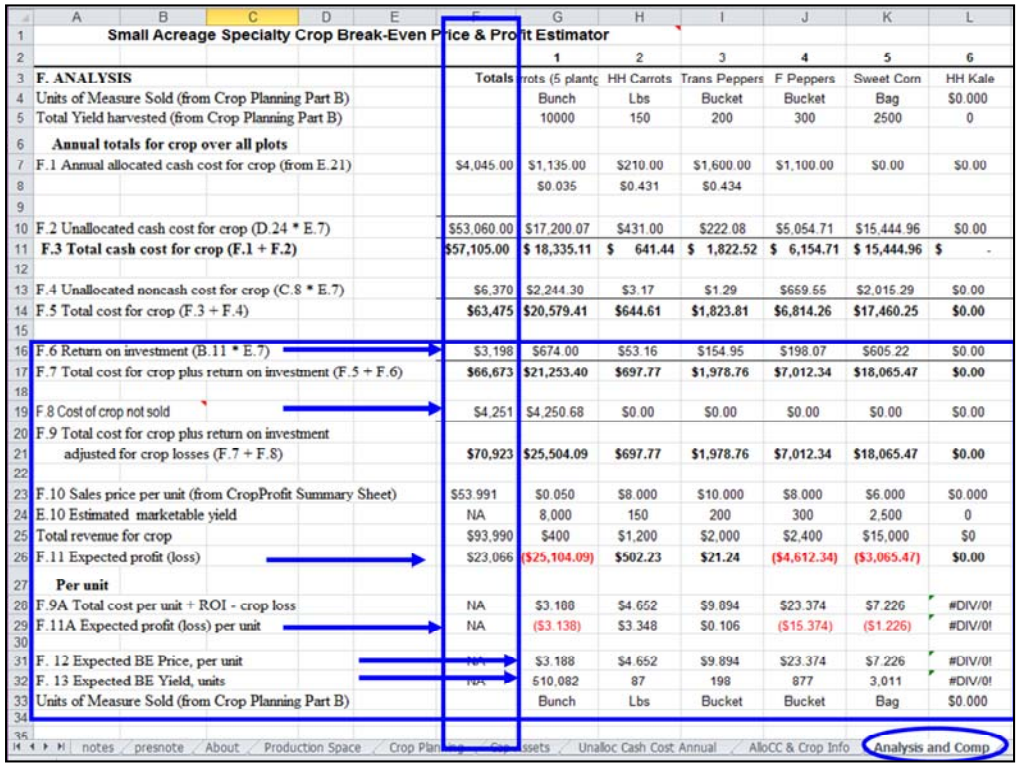
Analysis & Comp

1) The “Analysis & Comp Sheet” requires no data entry. It provides information on:
   a) Total cash cost for crops
   b) Return on investment for crops
   c) Cost of crops not sold
   d) Total revenues
   e) Expected profit (loss)
   f) Expected BE price per unit
   g) Expected BE yield per unit



	A	B	C	D	E	F	G	H	I	J	K	L
1	Small Acreage Specialty Crop Break-Even Price & Profit Estimator											
2							1	2	3	4	5	6
3	**F. ANALYSIS**					**Totals**	rots (5 plants	HH Carrots	Trans Peppers	F Peppers	Sweet Corn	HH Kale
4	Units of Measure Sold (from Crop Planning Part B)						Bunch	Lbs	Bucket	Bucket	Bag	$0.000
5	Total Yield harvested (from Crop Planning Part B)						10000	150	200	300	2500	0
6	**Annual totals for crop over all plots**											
7	F.1 Annual allocated cash cost for crop (from E.21)					$4,045.00	$1,135.00	$210.00	$1,600.00	$1,100.00	$0.00	$0.00
8							$0.035	$0.431	$0.434			
9												
10	F.2 Unallocated cash cost for crop (D.24 * E.7)					$53,060.00	$17,200.07	$431.00	$222.08	$5,054.71	$15,444.96	$0.00
11	**F.3 Total cash cost for crop (F.1 + F.2)**					**$57,105.00**	**$ 18,335.11**	**$ 641.44**	**$ 1,822.52**	**$ 6,154.71**	**$ 15,444.96**	**$ -**
12												
13	F.4 Unallocated noncash cost for crop (C.8 * E.7)					$6,370	$2,244.30	$3.17	$1.29	$659.55	$2,015.29	$0.00
14	F.5 Total cost for crop (F.3 + F.4)					**$63,475**	**$20,579.41**	**$644.61**	**$1,823.81**	**$6,814.26**	**$17,460.25**	**$0.00**
15												
16	F.6 Return on investment (B.11 * E.7)					$3,198	$674.00	$53.16	$154.95	$198.07	$605.22	$0.00
17	F.7 Total cost for crop plus return on investment (F.5 + F.6)					**$66,673**	**$21,253.40**	**$697.77**	**$1,978.76**	**$7,012.34**	**$18,065.47**	**$0.00**
18												
19	F.8 Cost of crop not sold					$4,251	$4,250.68	$0.00	$0.00	$0.00	$0.00	$0.00
20	F.9 Total cost for crop plus return on investment											
21	adjusted for crop losses (F.7 + F.8)					**$70,923**	**$25,504.09**	**$697.77**	**$1,978.76**	**$7,012.34**	**$18,065.47**	**$0.00**
22												
23	F.10 Sales price per unit (from CropProfit Summary Sheet)					$53.991	$0.050	$8.000	$10.000	$8.000	$6.000	$0.000
24	E.10 Estimated marketable yield					NA	8,000	150	200	300	2,500	0
25	Total revenue for crop					$93,990	$400	$1,200	$2,000	$2,400	$15,000	$0
26	F.11 Expected profit (loss)					$23,066	**($25,104.09)**	**$502.23**	**$21.24**	**($4,612.34)**	**($3,065.47)**	**$0.00**
27	**Per unit**											
28	F.9A Total cost per unit + ROI - crop loss					NA	$3.188	$4.652	$9.894	$23.374	$7.226	#DIV/0!
29	F.11A Expected profit (loss) per unit					NA	($3.138)	$3.348	$0.106	($15.374)	($1.226)	#DIV/0!
30												
31	F. 12 Expected BE Price, per unit					NA	$3.188	$4.652	$9.894	$23.374	$7.226	#DIV/0!
32	F. 13 Expected BE Yield, units					NA	510,082	87	198	877	3,011	#DIV/0!
33	Units of Measure Sold (from Crop Planning Part B)						Bunch	Lbs	Bucket	Bucket	Bag	$0.000
34												
35												

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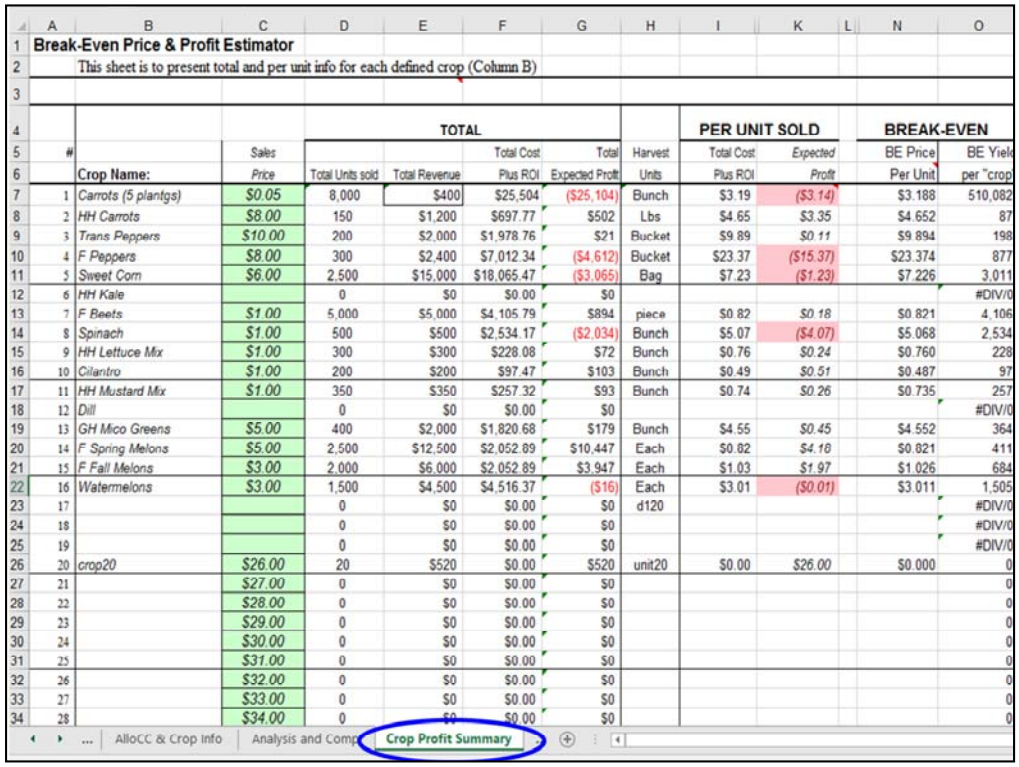
Crop Profit Summary

1) Start with the end in mind (one page summary)
   a) Look at your current sales price per crop
   b) Calculates total units sold per crop
   c) Calculates total returns per crop
   d) Calculates total cost plus ROI per crop & per unit sold
   e) Calculates expected profits per crop & per unit sold
   f) Calculates break-even price per crop & per unit sold
   g) Calculates break-even yield per crop



Break-Even Price & Profit Estimator

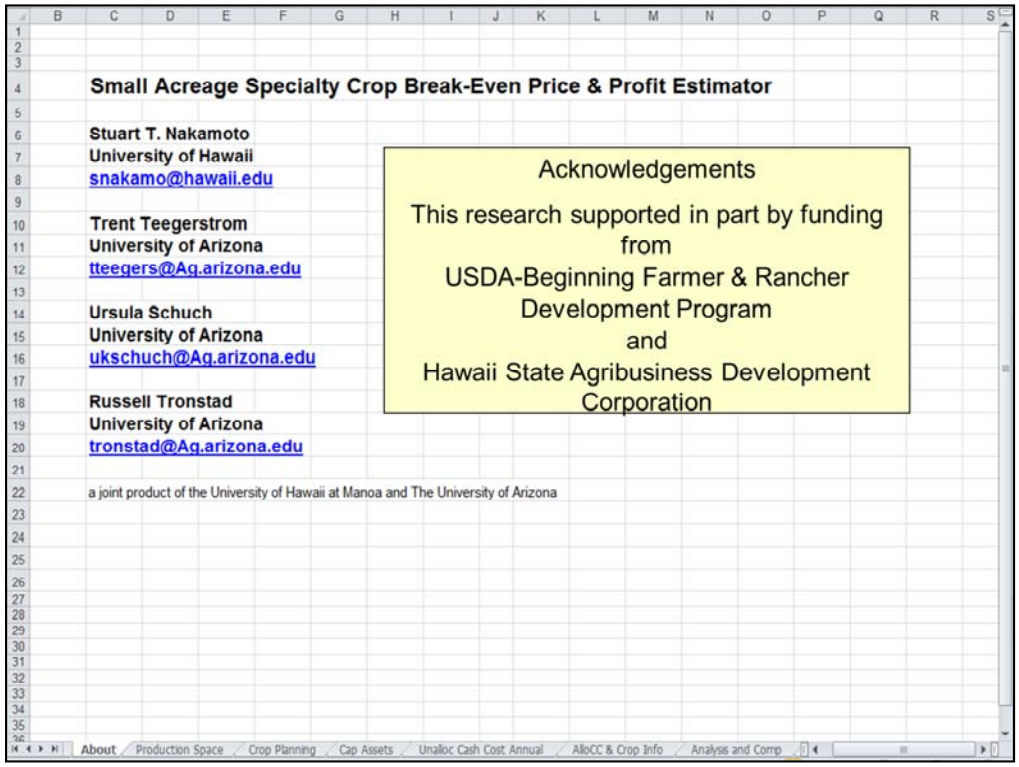
This sheet is to present total and per unit info for each defined crop (Column B)

				TOTAL				PER UNIT SOLD		BREAK-EVEN	
#	Crop Name:	Sales Price	Total Units sold	Total Revenue	Total Cost Plus ROI	Total Expected Profit	Harvest Units	Total Cost Plus ROI	Expected Profit	BE Price Per Unit	BE Yield per "crop
1	Carrots (5 plantgs)	$0.05	8,000	$400	$25,504	($25,104)	Bunch	$3.19	($3.14)	$3.188	510,082
2	HH Carrots	$8.00	150	$1,200	$697.77	$502	Lbs	$4.65	$3.35	$4.652	87
3	Trans Peppers	$10.00	200	$2,000	$1,978.76	$21	Bucket	$9.89	$0.11	$9.894	198
4	F Peppers	$8.00	300	$2,400	$7,012.34	($4,612)	Bucket	$23.37	($15.37)	$23.374	877
5	Sweet Corn	$6.00	2,500	$15,000	$18,065.47	($3,065)	Bag	$7.23	($1.23)	$7.226	3,011
6	HH Kale		0	$0	$0.00	$0					#DIV/0
7	F Beets	$1.00	5,000	$5,000	$4,105.79	$894	piece	$0.82	$0.18	$0.821	4,106
8	Spinach	$1.00	500	$500	$2,534.17	($2,034)	Bunch	$5.07	($4.07)	$5.068	2,534
9	HH Lettuce Mix	$1.00	300	$300	$228.08	$72	Bunch	$0.76	$0.24	$0.760	228
10	Cilantro	$1.00	200	$200	$97.47	$103	Bunch	$0.49	$0.51	$0.487	97
11	HH Mustard Mix	$1.00	350	$350	$257.32	$93	Bunch	$0.74	$0.26	$0.735	257
12	Dill		0	$0	$0.00	$0					#DIV/0
13	GH Mico Greens	$5.00	400	$2,000	$1,820.68	$179	Bunch	$4.55	$0.45	$4.552	364
14	F Spring Melons	$5.00	2,500	$12,500	$2,052.89	$10,447	Each	$0.82	$4.18	$0.821	411
15	F Fall Melons	$3.00	2,000	$6,000	$2,052.89	$3,947	Each	$1.03	$1.97	$1.026	684
16	Watermelons	$3.00	1,500	$4,500	$4,516.37	($16)	Each	$3.01	($0.01)	$3.011	1,505
17			0	$0	$0.00	$0	d120				#DIV/0
18			0	$0	$0.00	$0					#DIV/0
19			0	$0	$0.00	$0					#DIV/0
20	crop20	$26.00	20	$520	$0.00	$520	unit20	$0.00	$26.00	$0.000	0
21		$27.00	0	$0	$0.00	$0					0
22		$28.00	0	$0	$0.00	$0					0
23		$29.00	0	$0	$0.00	$0					0
24		$30.00	0	$0	$0.00	$0					0
25		$31.00	0	$0	$0.00	$0					0
26		$32.00	0	$0	$0.00	$0					0
27		$33.00	0	$0	$0.00	$0					0
28		$34.00	0	$0	$0.00	$0					0

... | AlloCC & Crop Info | Analysis and Comp | Crop Profit Summary

Potential Program Applications

1) Pricing
2) Selecting Crop Mix
3) Grow vs Buy Transplants
4) Comparing Production Practices
5) Space Use
6) Sizing up
7) Evaluating a New Input (Fert or Chem)



Small Acreage Specialty Crop Break-Even Price & Profit Estimator

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