



Making Major Money with Minor Crops

PRODUCING PROFIT ON THE EDGES
*(BASIL, CILANTRO, CHOI, PARSLEY, SCALLIONS,
SHALLOTS, & SUMMER LEEKS)*

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2016 NOFA/MASS WINTER CONFERENCE
SATURDAY JANUARY 16, 2015 - WORCESTER, MASS

Brix Bounty Farm

Exponential Growth in Health Care Costs

Growing a Foundation for Health... Starts in the Soil

Market to Our Immediate Community

Passion for Growing Food (Working in the Field)

Harness Nature's Bounty - > Employing Nature's Diversity



Productivity &
Profitability

Seeds
Soil
Sunshine
Rain
Labor
(\$) Customers
=
Veggies

Lettuce Mix - Nov 17, 2015

Specialty Crops Project - NOFA/MA, NH, & VT

3 year project funded by USDA Specialty Crops Grant
(administered by each state)

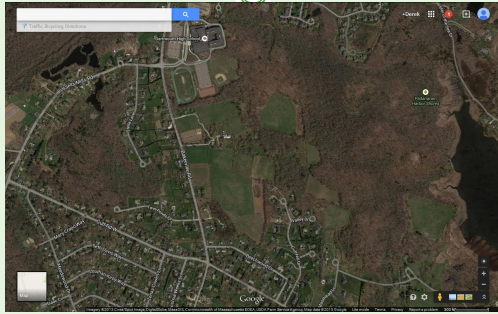
32 farms each growing 2-3 crops

Enterprise Analysis

Examining Productivity & Profitability

Wiswall, *Organic Farming Business Handbook*
Hartman, *Lean Farm*

Google View – Brix Bounty Farm



Brix Bounty Farm – Labor & Experience

Derek Christianson – Growing Veg Since 2002.
 Brix Bounty 2008, Relocated (2 miles) in 2014

~7 acres under production w/3,500 sq. ft. under plastic

2 Full-Time Employees (March > Nov) + winter
 1 Part-Time Seasonal (May-Aug) + 3-4 workshares
 David King – Tractor Work – primary tillage, etc (100 hrs)

Brix Bounty Budget at a Glance

“Early Stage Maturity” at Markets
 \$145K Veg Sales projected for 2016

Roadside Stand (\$80K)

80-90 member Summer CSA (\$45K)
 40 member Winter CSA (\$12K)

Downtown NB Market (\$8K)
 ~\$3-5K additional Farm Income (consulting, projects)

Gross Sales “Targets” per Bed

Currently we have 233 beds on the farm – approx. 7 acres
 33 beds per acre (1320 sq. ft. – 220’ x 6’ avg.)

High Value Crops

Target \$60K+ per acre or \$2K per bed (~\$1.50 sq. ft.)

Medium Value Crops

Target \$35K per acre or \$1K per bed (~\$1 sq. ft.)

Low Value Crops

Target \$20K per acre or \$600 per bed (~.50 sq. ft.)

Enterprise Budgets: Simple > Complex

The Importance of Fieldkeeping



Accurately Reflect
 Costs of Production

Budgeting our Time

Determining Profit
 Pricing

Labor Costs – At Brix Bounty

Labor Costs are the Largest Cost for the Farm.

Our Crew – an Investment in the Community
 Wages Rise as Farm’s Capacity Increases...

Target Net Income \$40-50K (depending on reinvestment)
 ~3500 hours (\$11.50 - \$14 hour)
includes community work and non-production hours

Gauging Your Farm's Common Rates

Cost of Producing Flats (GH Production)
 Primary & Secondary Tillage
 Amendment Applications
 Direct Seeding / Transplanting
Row Cover
Cultivation & In-Season Fertility
 Irrigation
Harvest
Post Harvest
 Mowing & Establishing Cover Crops

Basil

GH (4-5 wks) > TP (4-6 wks) > H
 Select Varieties for Your Needs:
 Italian Large Leaf
 4 seeds/cell – 128's at 3 Rows 6" or 1'
 At Brix in '16 – 15M for 500' + 240' late (\$30 for seed/3yrs)

Target Yield of 6 bags per bed foot for main crop
 {CSA 100x10, Mkt 24x12, Stand 1,500 = 2,788}
 \$3 per bag
 Gross Target: \$18 per bed foot
 \$3,960 per bed or ~\$140K per acre

Basil – August 13, 2015



Basil – August 21, 2015



Basil – August 21, 2015



Perspectives on Basil

Ultimate High Value Crop
 (Especially in Tomato Season)

Alas... Basil Downy Mildew – limits sales in Fall

Select the Harvesting Method which Meets Your Needs

At Brix we Harvest Large Bunches from the Top and Bunch or Bag (mostly bag – reduce injury to leaves, etc.)

Seasonality – we offer a bounty to our CSA w/ease during high season...

5 Characteristics of High Value Crops

- Short "Real-Estate" Period (days in the field)
Scallions vs. Lexton Leeks
- Compact Growth Habit / May Be Densely Planted
Cilantro vs. Artichokes
- Multiple Harvests (re-growth)
Basil vs. Cabbage
- Easy/Quick to Harvest, Minimal Post Harvest Work
Parsley vs. Green Beans (slow harvest)
- Small Size per Unit – High Value per Space on Market Truck
Shallots vs. Watermelons

Potential Gross Value for These Crops (weeks in the field)

- Basil (10-12): \$18-\$20/bed foot (at \$3/bag) – 6 - 6.75 bags
- Choi (3-8): \$7.50 - \$15/bed foot (at \$2.50/bunch) – 3-6 b.
alternatively cut loose for multiple harvests (in the spring/fall)
- Cilantro (6-10): \$18/bed foot (at \$2/bunch) – 9 bunches
- Parsley (~16): \$18/bed foot (at \$2/bunch) - 9 per bed'
- Scallions (6-8): \$6/bed foot (at \$2/bunch) – 3 per bed'
- Shallots (16): \$8.25/bed foot (at \$3 per pint or ~\$.75 ea)
- Summer Leeks (12-16): \$9 - \$10.50/bed foot (\$3 - \$3.50)

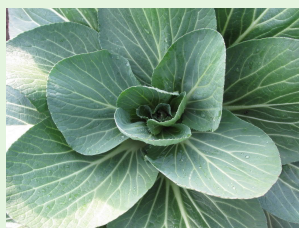
Choi

- GH (3 wks) > TP (3-8 wks) H
- Select Varieties for Your Needs:
Joi Choi (types), Black Summer, Mei Qing, Red Choi
- 2 seeds/cell – 128's at 3 Rows 6"
- At Brix in '16 – 15M for 1200' (\$50 for seed)
- Target Yield of 3 bunches per bed foot = 3,600 bunches
{CSA 100x7, WCSA 40x4, Mkt 12x17, Stand 1,200 = 2,264}
- \$2.50 per bunch
- Gross Target: \$7.50 per bed foot
- \$1650 per bed or ~\$60K per acre

Choi – June 15, 2015



Choi – December 27, 2015



Perspectives on Choi

Very Broad Harvest Window – Great for CSA
cut at baby stage if you need a cooking green,
let grow to larger size as necessary

Protect from Flea Beetles – at planting

Bunching ... takes a while 2-3 b. per minute (\$300-\$450 H/Hr)

"Easier" to produce high quality in the fall

Increase Yield (equal footprint)...
1st cut as loose leaf in Oct 2015

Cilantro

Multiple Successions – Transplanted, yes Transplanted!
GH (3-4 wks) > TP (3-5 wks) > H:

Calypso

4 seeds/cell – 128's at 3 Rows 6'' – protect from rodents
At Brix in '16 – 20M for ~740' (\$13.25 for seed - extra)

Target Yield of 6 bunches per bed foot per succession
{CSA 100x11, WCSA 40x5, Mkt 24x17, Stand 2,000}

\$2.00 per bunch

Gross Target: \$12 per bed foot

\$2,640 per bed or ~\$95K per acre

Calypso Cilantro – June 12, 2015



Perspectives on Cilantro

Potential for very good returns per square foot

Hand transplanting allows "young" seedlings to be set out.
& "Wide Window" for Initial Cut... potential for 2x-3x cuts

FERTILITY MANAGEMENT (Calcium)

Very Quick to Harvest (when well cultivated)

Gardeners are challenged by cilantro... strong market

Parsley

Multiple Successions

GH (5-6 wks) > TP (5-6 wks) > H:

4 seeds/cell – 128's at 3 Rows 6'' – protect from rodents
At Brix in '16 – 15M seed for 240' (3x), 120' (3x), 240' (2x)
(\$18 for seed) FRESH EVERY YEAR!

Target Yield of 9 bunches per bed foot per succession

\$2.00 per bunch

Gross Target: \$18 per bed foot

\$3,960 per bed or ~\$142K per acre

{CSA 90x9, WCSA 40x6, Mkt 30x17, Stand 2,000}

Determining Demand and Seasonality

Parsley – 1,060 b. after October 1, ~3,600 b. total

Summer CSA – 9 distributions x 100 = 900 b.

Winter CSA – 6 distributions x 40 = 240 b.

Market – 17 markets x 30 = 510 b.

Stand = ~2,000 b.

June 50 x 4 wks = 200 July 90 x 4 wks = 360

Aug 120 x 4 wks = 480 Sept 90 x 4 wks = 360

Oct 60 x 4 wks = 240 Nov 40 x 4wks = 160

Dec 25 x 4 wks = 100

Perspectives on Parsley – Deer Fencing!

Potential for **Very Good Returns** per square foot

Market Preference for Flat Leaf

Alternaria & Leaf Blight

Very Quick to Harvest - when well cultivated

Target 4-6 bunches/minute (\$480-\$720 H HR)

Quick to wash (if necc)

Need to Over-Produce in Summer to Meet Need in Fall?

Scallions



GH, TP, H
 Parade, White Spear
 5-6 seeds/cell – 128's at 3 Rows 6"
 At Brix in '16 – 33M for 1100' (\$30-\$50 for seed)

Target Yield of 3 bunches per bed foot = 3,300 bunches
 {CSA 100x5, WCSA 40x4, Mkt 20*17, Stand 2,000}
 \$2.00 per bunch
 Gross Target: \$6 per bed foot
 \$1,320 per bed or ~\$47K per acre

Scallions – June 15, 2015



Scallions – August 1, 2015



Scallions – August 20, 2015



Perspectives on Scallions



Very Popular at Market,
 Wide Harvest Window (if quality/market support is there)

LABOR INTENSIVE TO HARVEST
 Pull, Trim Roots, Bunch, Top (if necc) > Spray
 60 bunches / hr (\$120 H Hr)
 Post Harvest pretty quick > (\$100 H+PH Hr)
 If less peeling necc ... up to 120 bunches / hr

at Competition for what other activities?
 We limit scallions to our CSA (2x June, 1x Summer, 2xFall)

Considering Input Costs – a Case for Compost



Traditional Scallion Culture at Brix Bounty – 3Rows, 6"

1 Bed Yields ~660 bunches or \$1,320 Value

Casella Compost - \$24.75/cu. yd. delivered

If we were to apply 2 yards to a bed (70 yds/acre) cost
 would be \$50 + labor to apply...

Provide fertility for 5 Rows, 6" > \$2,200 Value

\$880 Increase in Gross Value minus Costs of Compost

Roles of "Minor Crops" on the Farm

Create market diversity for our farmstand, CSA, and farmers market customers.

Crop Diversity = Our Crop Insurance

Provide crops which are less common or less consistent in home gardens – e.g. complement tomatoes



Shallots

GH (seeded):22715, TP: 50215, H: mid-August
 Camelot (large size), Conservor
 2 seeds/cell – 128's at 3 Rows 6"
 At Brix in '16 – 3M for 220' (\$52.25 for seed)

Target Yield of 4 x ½ pints per bed foot = 880 boxes
 {CSA 90x3, WCSA 40x5, Mkt 60, Stand 350}
 \$2.50 per ½ pint or \$.75 each
 Gross Target: \$10 per bed foot
 \$2200 per bed or ~\$80K per acre

Camelot Shallots – August 20, 2015



Perspectives on Shallots

Classic High Value Crop - ~\$4 to \$6 per lb.
 We market at the stand:
 \$2.50 for a heaping ½ pint or \$.75 each

Start in GH early as reasonable, keep weeds and pests at bay

Harvesting & post harvest is "labor intensive"

15 minutes per 5 gallon bucket if peeling/clipping for fresh market sales
 If 26 buckets = 6.5 labor hours in field + 2 post harvest
 (\$250+ per hour H+PH value)

Good storage life... but at what cost? Aug-Dec at Brix

Summer Bunching Leeks

GH 222 or 229 > TP 425 > H: beginning mid/late July
 Lincoln, Alto (High Mowing Seeds)
 5 seeds/cell – 128's at 3 Rows 6"
 At Brix in '15 – 4M for 120' (\$12 for seed) – 2x in '16 ?

Target Yield of 3 bunches per bed foot = 360 bunches
 {CSA 100x2, Mkt 8x6=48, Stand 20x6=120}
 \$3 - \$3.50 per bunch
 Gross Target: \$9-10.50 per bed foot
 \$1,980 per bed or ~\$70K per acre

Perspectives on Alto Leeks (8/20/15)

Popular among "Foodies"

Not much more work than scallions
 (2 additional cultivations)
 a bit more \$ per bed foot

Provides mid-season allium diversity
 avoid onion burnout in CSA
 preview of Fall Leek season



Takeaways

Labor is Expensive... (Lens > That is Good)

Fertility is Both a Good Short and Long Term Investment

"Fieldkeeping" – A Decision Making Tool

Minor Crops Are Only 1 Part of the Picture

Focus on Major Crops -
Where You Invest the Most Land and Labor

Quick Exercise Sheet – Determining Harvest Needs

Mkt Outlet #1 _____	Yield Per Bed Foot _____
# of Units _____	
x Distributions _____	Estimate Yield in Field
Mkt Outlet #2 _____	at 80 – 90%
# of Units _____	therefore plant additional 25%
x Distributions _____	
Mkt Outlet #3 _____	Also plan for losses in the gh
# of Units _____	
x of Distribution _____	seed additional 10-20% of # of
	transplants needed
TOTAL # OF UNITS _____	

Fieldkeeping Made Easier

Dedicated Clipboard or Folder (if multiple person team)

Don't Try to Measure Everything...
Measure Standard Rates

"Snapshot" of yields and time spent on activity

i.e. GH Spinach (Jan 8, 2016) – 34 X-L Bags – 30 bed
FH beds at 5R, 6'' - plants cut to base
4 Orange Bushel Baskets – 40 min to H + PH (bag)
\$5 per bag value = ~\$250 per H + PH HR

Growing Profit at the Edges

Important to Consider Fixed Costs of Farming

If you have customers, is there something you could add to your production cycle which would be popular and profitable.

Helpful for CSA, but real profit for these crops come from market, stand, direct sales...

Capacity to create your own niche

Upcoming Educational Events

Winter Study Session (Wednesdays in Feb/Mar.)
The Farm at Ecosystem – Jerry Brunetti

Soil & Nutrition Conference 2016 – Feb 8,9 at Kripalu
Mid-Season Corrections w/ Foliar Sprays

SEMAP Ag & Food Conference – Sunday Feb 28 – Dighton

Hugh Level – March 5-7 in Warren, Rhode Island
<http://bionutrient.org/events>

Thank You

Handouts & Presentation
Available at www.brixbounty.com

For more information on this presentation contact:

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