Lean Farming on off the Ground Glade Road Growing for VABF March 2021





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All online courses and materials 25% off through March 31

Use code (all caps): MARCH25





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Lean Farm

How to Minimize Waste, Increase Efficiency, *and* Maximize Value and Profits with Less Work

Ben Hartman 🖄



The Lean Farm Guide to Growing Vegetables

More In-Depth Lean Techniques for Efficient Organic Production

× Ben Hartman ×



How to Minimize Waste, Increase Efficiency, *and* Maximize Value and Profits with Less Work

Ben Hartman 🗵



More In-Depth Lean Techniques for Efficient Organic Production

< Ben Hartman

"How to **minimize waste,** increase efficiency, and maximize value and profits with less work"



How to Minimize Waste, Increase Efficiency, *and* Maximize Value and Profits with Less Work

Ben Hartman



More In-Depth Lean Techniques for Efficient Organic Production & Ben Hartman



























www.gladeroadgrowing.com

Vegetables

Our own certified naturally grown produce raised by us right here in Blacksburg, Va. We only sell produce that we grow ourselves. Flavorful and nutrient-dense.

Click on the individual products to see typical weights per pack and description.





Asian greens, Bok

Choy

\$3.85

Add to cart



Asian greens,

Mizuna

\$3.85

Add to cart





Carrot Soups \$12.75

Select options



Carrot, Bulk

\$10.75

Add to cart



Glade Road Growing Facebook feed

Glade Road Growing



Need a ham for Easter? We have whole









Asian Greens,

Tokyo Bekana

\$3.85

Add to cart



Greens

First Name: Your first name Last Name!

Your last name

newsletter!

Sign up for our farm's

Email address:

Your email address

Sign up





Greens Arugula

Greens Collards

Greens Pea Shoots











"How to minimize waste, increase efficiency, and maximize value and profits with less work" **Vegetable Production Crop health** nemii c Production **Hoophouses** JOJ Sanbiu 41dag. **Mechanized intensive production** s9lds] Harvest/wash/pack labor SUIN Sales **Online farm market Farm share** əų I



Lean Techniques in Vegetable Production





Why is crop health part of a lean talk?







AEA Standard Vegetable Program

This example AEA program is representative of the products and rates that continually result in improved crop production for growers of vegetable growers across the country and is appropriate for the majority of garden produce. For the small grower, these product applications are an excellent start to regenerative management. There is no one size fits all solution, though. Programs should be modified based on soil and sap reports, crop advisor recommendations, actual plant performance, and where appropriate, organic certification requirements. AEA can arrange for customized consulting to better maximize performance on your acreage.

AEA's crop nutrition management program can bring higher yields and improved resistance to insects and disease through optimized nutrition resulting in greater economic returns.

Standard Mixed Vegetable Program for Personal and Market Growers

Standard Potato Program

Links 🔨 🛱 💭 🌄

12:53 PM





NovaCropControl

postbus 2218 - 5001 CE - Tilburg



www.novacropcontrol.nl

Plant sap-sample	¹ 20200713	1278	Sample date:	12-7-2020	
	² 20200713	1279			
Name:	Glade Road Growing		Location/plot:	Greenhouse	
Address:	2204 Glade Rd		Cultivation:	Tomato	
	24060	Blacksburg, VA	Crop:	Tomato	
	USA		Plant part:	¹ Leaf (young)	² Leaf (old)
Remarks					

Mineral		Current level	Optimum			
Total Sugars	%	0,4	0,7 - 2,1	1		i
-	%	0,2		2	i	İ.
pН		6,5	6,2 - 6,6	1		1
		6,7		2	i	-
EC	mS/cm	12,7	12,5 - 15,5	1		1
	mS/cm	15,6		2	i	÷.
K - Potassium	ppm	3950	3393 - 4407	1		1
	ppm	4099		2		İ
Ca - Calcium	ppm	1023	2485 - 4515	1		1
	ppm	3381		2		i
K / Ca		3,86		1		1
		1,21		2	i i	1
Mg - Magnesium	ppm	483	560 - 840	1		1
	ppm	721		2		1
Na - Sodium	ppm	17	28 - 62	1		
	ppm	9		2		1
NH4 - Ammonium	ppm	805		1		
	ppm	805		2	l	1
NO3 - Nitrate	ppm	931	70 - 210	1	+	-
	ppm	243		2		-
N in Nitrate	ppm	210	16 - 47	1		-
	ppm	55		2		-
N - Total Nitrogen	ppm	1966	1147 - 1552	1	· · · · · ·	-
	ppm	1401		2		1
CI - Chloride	ppm	702	620 - 1230	1	<u> </u>	
	ppm	592		2	i	1
S - Sulfur	ppm	849	1235 - 2015	1		1
	ppm	1707		2		1
P - Phosphorus	ppm	270	180 - 420	1		1





Hoophouses

Hoophouses














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1.











































Harvest wash/pack/cooler





Harvest wash/pack/cooler





All of our positions require the following:

- Can work independently and in a team
- Positive and respectful attitude
- Responsible and reliable
- Teachable
- Committed
- Good communication skills
- Adaptable and flexible with necessary plan changes due to weather, market, crew dynamics, etc
- Physical strength to lift 50 lbs without injury to yourself
- Can maintain your own physical and mental health; awareness for safety of self and others
- Physically able to deal with adverse weather conditions
- Can work fast to set a standard for others

Benefits to working here (besides starting wages listed) include:

- Home-made lunch provided
- Free produce for you/your family's home consumption
- Discounted farm meats available in staff freezer
- Discounted meals and drinks at Rising Silo Brewery
- Unpaid personal time off available when prearranged
- Unscheduled cash bonus
- Position: Seasonal crew member, introductory position, starts at \$11/hr
- o May- November; 3 month minimum, 30-40 hrs/week, M-F, 8:15 am until 5 pm or 6 pm

Tasks include

- o Bulk harvesting
- o Daily harvesting needs
- o Washing
- o Packing



Lean Techniques in Selling

Online farm market Farm Share

Online Farm Market




Vegetables

Sign up for our farm's newsletter!

'What they want, when they want it, and how much they



Asian greens, Bok

Choy

\$3.85

Add to cart

Default sorting



Asian greens,

Mizuna

\$3.85

Add to cart

Showing all 30 results



Asian Greens,

Tokyo Bekana

\$3.85

Add to cart



Carrot Soups \$12.75

Select options



Your last name

Your email address

Sign up

Email address:

Carrot, Bulk

\$10.75

Add to cart

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Need a ham for Easter? We have whole



Carrots Greens Arugula Greens Collards Greens www.gladeroadgrowing.com



Greens Pea Shoots



Products « Glade Road	i × + -									
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Ø Jetpack										
Screen Options Help										
😋 Media	Exported file orders-export-2021_03_22_03_34_02.csv is ready! You can download the exported file from the Export List.									
Pages	Pages									
두 Comments 🚺	All (275) Published	(262) Drafts (11) Private (2) Sorting) [Search	products		
Keaflet Maps Marker	Bulk actions 🗸	Apply Vegetables (140)	Filter by product type 🗸	In stock	✓ Filter			34 items		
Galleries		Name	Stock	Price	Categories	Tags	★ Date			
Secipes		Greens, Spinach (Baby)	In stock (16)	\$4.00	Vegetables	-	☆ Published 2021/03/17 at 4:56 pm			
WooCommerce Products		Carrot Soups	In stock	\$12.75	Prepared foods, Vegetables	π.	Published 2021/02/09 at 8:29 pm			
All Products		Carrot, Bulk	In stock (74)	\$10.75	Vegetables		Published 2020/10/30 at 6:34 pm			
Add New Categories		Asian Greens, Tokyo Bekana	In stock (2)	\$3.85	Vegetables	-	Published 2020/10/26 at 6:03 pm			
Tags Attributes		Herbs, Rosemary	In stock (10)	\$2.95	Vegetables	÷.	산 Published 2020/10/25 at 9:00 pm			
 Analytics Marketing 		Potato, Kennebec	In stock (2)	\$5.00	Vegetables	-	Published 2020/10/07 at 6:36 pm			
Appearance		Lettuce, Baby Head Lettuce Variety Bag	In stock (3)	\$4.15	Vegetables	-	Published 2020/05/25 at 5:45 pm			
🖆 Plugins 2		Radish, Purple Daikon	In stock (413)	\$3.35	Vegetables	-	☆ Published			
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Track sales

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			Post		Current Sale	Ø
Salad Mix	Spinach	Micro Mix	Chard Bu	Escarole	Salad Turnips	\$3.00
125068	1994-	JES	STR.		Radish	\$3.00
Petite Gre	Herb Bunch	Salad Tur	Radish	Pea Shoot	Beets Bunch	\$3.00
Stark.	an.	1.5.8		1	Тах	\$0.22
BARK	WWW S	100				⊟ Reports
Lettuce h	Tat Soi Ra	Celeriac	Beets	Carrots		Payment Methods
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Watermel	Daikon Ra	Black Rad	Rutabaga	Potatoes		Category Sales
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orts		0		Setup Guide 🔍 🗔 💭	Glade Road Growing
Methods	Top 5 Items: Gross Sales				0
s		\$1,350.00 • 2021 Main season bag share- Vintage Cellar p	oick up (26 weeks) \$475.00 • Online Preorder Item	s \$254.35 • 2021 Egg share- 26 weeks (main sea	
Sales es	\$1,000		\wedge		
Sales				\frown	
5	\$0	6 am 9 am	12 pm	3 pm 6 pm	9 pm
Sales	Item	Items Sold	Gross Sales	Returns	Net Sales +
	Asian greens, Mizuna	2	\$7.70	\$0.00	\$7.70
	Asian greens. Mizuna	2	\$7.70	\$0.00	\$7.70
		<u>1</u>	\$3.85	\$0.00	\$3.85
	i	1	\$3.85	\$0.00	\$3.85
		3	\$32.25	\$0.00	\$32.25

3

14

14

271

\$32.25

\$53.90

\$53.90

\$3,473.50

\$0.00

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1	3/13/21-3/21/21	(
	Row Labels	Sum of ite	em_ Row Labels	Sum of it	tem_quantity								
	Asian greens, Bok Choy	29	Greens, Spinach (bagged)	48									
	Asian greens, Mizuna	7	Lettuce, Lettuce mix - 0.33 pound	ic 47									
	Asian greens, Tat Soi	3	Carrots	45									
	Asian Greens, Tokyo Bekana	5	Greens, Tender Spring Mix	38									
	Carrot, Bulk	10	Kale, Red Russian	32									
	Carrots	45	Asian greens, Bok Choy	29									
	Greens, Arugula	11	Greens, Microgreens Mix	28									
	Greens, Collards	3	Herbs, Cilantro	21									
	Greens, Microgreens Mix	28	Turnips, Hakurei	15									
	Greens, Pea Shoots	7	Greens, Spinach (Baby)	14									
	Greens, Spinach (Baby)	14	Herbs, Dill	12									
	Greens, Spinach (bagged)	48	Greens, Arugula	11									
5	Greens, Tender Spring Mix	38	Carrot, Bulk	10									
	Happy Hollow Honey	3	Herbs, Rosemary	10									
7	Herbs, Cilantro	21	Lettuce, Baby Head Lettuce Varie	ie 10									
8	Herbs, Dill	12	Radish, Watermelon	10									
)	Herbs, Rosemary	10	Onion, Green (Scallions)	8									
0	Kale, Red Russian	32	Asian greens, Mizuna	7									
1	Lettuce, Baby Head Lettuce Variety	10	Greens, Pea Shoots	7									
2	Lettuce, Lettuce mix - 0.33 pound t	t 47	Radish, French Breakfast	6									
È.	Lettuce, Lettuce mix - 1 pound bag	3	Asian Greens, Tokyo Bekana	5									
4	Onion, Green (Scallions)	8	Radish, Loose Red Salad	4									
5	Radish, French Breakfast	6	Asian greens, Tat Soi	3									
6	Radish, Loose Red Salad	4	Greens, Collards	3									





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Farm Share/CSA



Farm Share/CSA



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Farm Share/CSA

Vegetables

Our own certified naturally grown produce raised by us right here in Blacksburg, Va. We only sell produce that we grow ourselves. Flavorful and nutrient-dense.

Click on the individual products to see typical weights per pack and description.













Carrots



Greens Arugula

Mizuna

\$3.85



Asian Greens,

Tokyo Bekana

Greens Collards







Carrot Soups

\$12.75



Greens Pea Shoots

Glade Road Growing



Need a ham for Easter? We have whole



www.gladeroadgrowing.com

Greens

Sign up for our farm's newsletter!



Read our most recent newsletters

Glade Road Growing

Summary

Vegetable Production

Crop health- focus on improving soil microbiology for a healthier, tastier, more productive crop

Hoophouses- automation, insect screening Mechanized intensive production- choose tools to

minimize hand labor

Harvest/wash/pack labor- reduce heavy lifting, make

cleanable; have smooth, pleasant flow from garden to cooler

<u>Sales</u>

"Give them what they want, when they want it, and how much they want" What are the bottlenecks in your system?

When you look around you farm what physical and mental baggage is pulling you down?

What **waste** do you see (physical junk, unnecessary motions, clogged up space) that can be minimized?



Jason Pall & Sally Walker

www.gladeroadgrowing.com farm@gladeroadgrowing.com Ph. 540-808-0672

BLACKSBURG, VIRGINIA