

# Homefield Farm

at Kentland Farm

## 2020 Annual Report



## Acknowledgments

Blake Bensman, Sustainability Manager, Dining Services and HRL  
Mike Evans, Director; SPES  
Ted Faulkner, Director, Dining Services  
John James, UHC Facilities Manager, SPES  
Tom Kuhar, Professor, Entomology  
Nick Link, Assistant Farm Manager (former)  
Ben Marks, Associate Director, Dining Services  
Anthony Purcell, Assistant Director for Southgate, Dining Services  
Brooks Saville, Kentland Farm Agricultural Manager, CALS  
Susan Sumner, Associate Dean of Academic Programs, CALS  
Homefield Farm summer crew, Dining Services  
Sustainable Agriculture Practicum students

Photographs courtesy of Victoria Boatwright, Darren Van Dyke, and Alex Hessler.

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# Executive Summary

## A Year in Review

Homefield Farm is six-acre certified organic vegetable farm located at Kentland Research Farm that provides experiential learning opportunities in sustainable agriculture and grows fresh produce for Virginia Tech Dining Services. The farm is operated collaboratively by Virginia Tech Dining Services, the School of Plant and Environmental Sciences, and the College of Agriculture and Natural Resources. Homefield has hosted the Sustainable Agriculture Practicum, a hands-on course in organic vegetable production, since 2014. Thirty-five students enrolled in the course in the spring and fall of 2020, more than any other year. Dining services staff from multiple dining centers provided critical assistance with planting and harvesting at the farm during summer break. Though the assistant farm manager position was filled in January, it was vacated in April, and two student farm workers were hired in the fall to provide supplemental support.

In 2019, Homefield provided 26,999 pounds of produce, valued at \$29,803, to campus dining centers.. Total operating costs, excluding labor, were \$11,670.

Homefield Farm remained committed to providing nutritious fresh produce and hands-on learning to students in 2020, despite the challenges presented by the COVID-19 pandemic. Though the Farm Market Field Study was not offered in the fall, the on-campus farm stand was still open on three occasions, offering fresh produce from Homefield Farm for sale. Sales totaled \$616 from 689 pounds of produced.



# Crop Production and Value

**Total Harvest: 27,570 pounds**

**Delivered to Dining Centers:  
26,999 pounds**

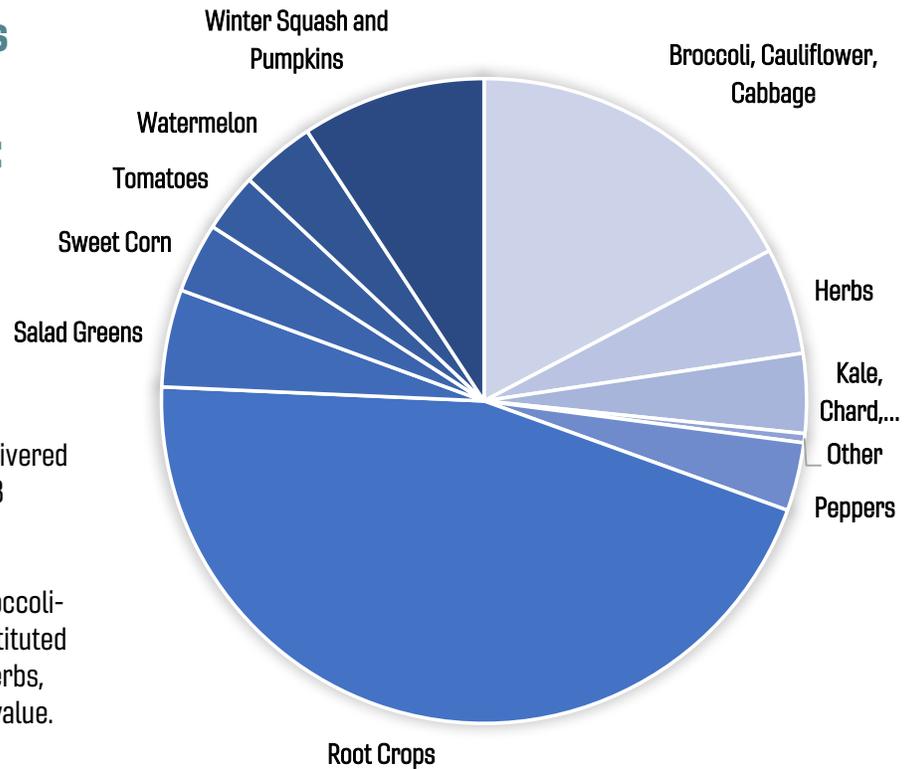
**Market Value : \$29,803\***

*\*Crops delivered to Dining Centers*

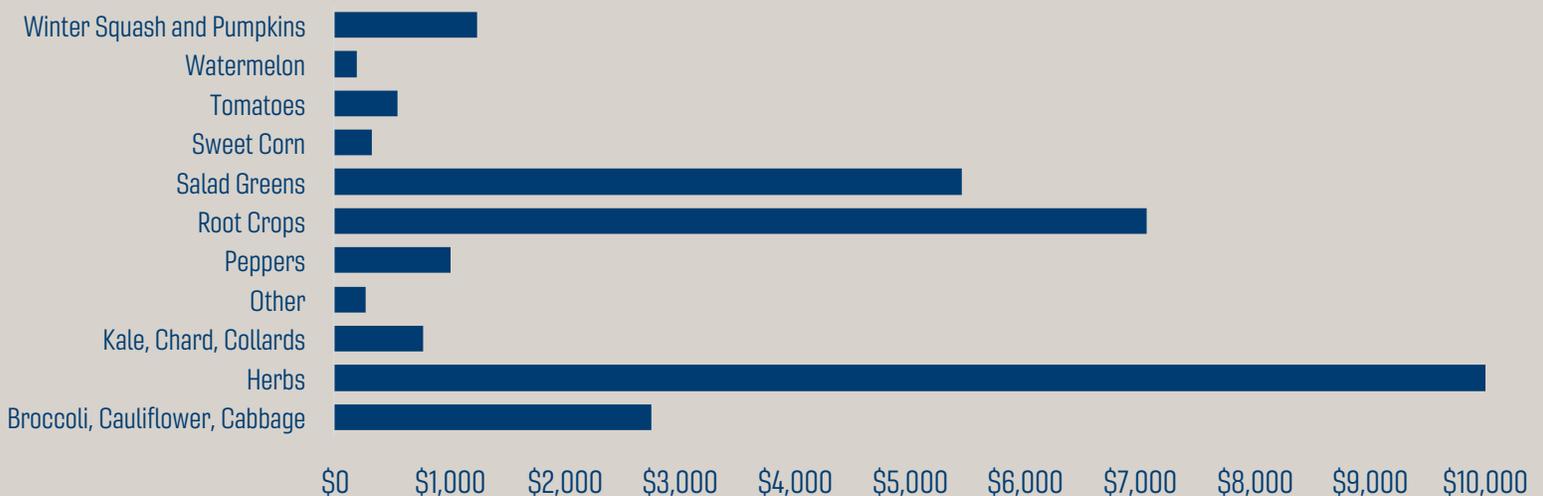
Of the 27,570 pounds harvested, 26,999 were delivered to campus dining centers, with the remaining 573 pounds being sold at the on-campus farm stand

Root crops, winter squash and pumpkins, and broccoli-cauliflower-cabbage (principally cabbage), constituted the greatest portion of the harvest by weight. Herbs, root crops, and salad greens provided the most value.

A more detailed breakdown of harvest by crop, and crops requested by each dining center, can be found in the appendix.

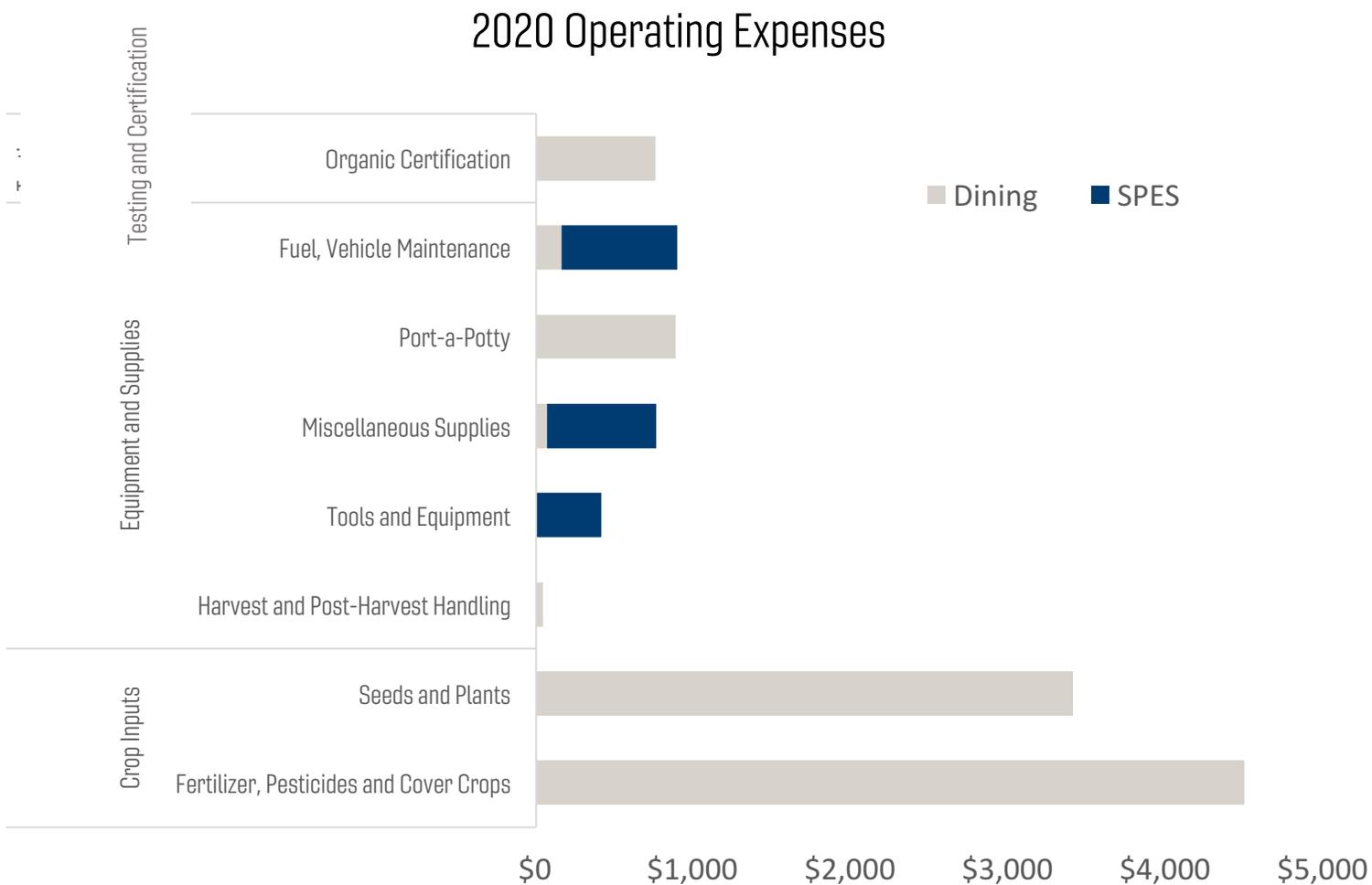


## Market Value of Crops Delivered to Dining Centers



# Operating Expenses

2020 operating costs for Homefield Farm totaled \$11,670. Dining Services contributed \$9,8370 (84%), and the School of Plant and Environmental Sciences contributed \$1,840 (16%). No new tools, equipment, or infrastructure was purchased in 2020, significantly reducing expenses. A detailed expense report can be found in the appendix.



# Student Engagement

## Sustainable Agriculture Practicum

In 2020, thirty-five students participated in the Sustainable Agriculture Practicum, the hands-on course in organic vegetable production that takes place at Homefield Farm and the Urban Horticulture Center. The COVID-19 pandemic challenged the student educational experience at Virginia Tech, and the Sustainable Agriculture Practicum was no exception. In the spring semester, the course was fully online, and students did not participate at the farm. In the fall, however, the on-farm portion of the course operated as normal, with the weekly lecture occurring online.

2020 enrollment in the Sustainable Agriculture Practicum was higher than any previous year. Students expressed their eagerness and gratitude for the opportunity to be outside, get their hands dirty, and interact in person, albeit at a safe distance.



*Students harvesting hot peppers for the annual Chili Challenge.*

# On-campus Farm Stand

In the fall of 2020, the farm stand adapted to reduced on-campus student population by opening on three times during the semester. All produce was offered as individualized items or containers, rather than by the pound, to minimize contact during shopping. The Farm Market Field Study course was not offered, and a wage student farm worker provided assistance with set-up and operation of the farm stand. A Dining Services cashier managed electronic transactions, included accepting meal plan money.



**Total Sales:** Value: \$689  
Weight: 616 Lb.



# Special Events



*Chef Mark Moritz of Turner Place serves a Homefield Farm cream of asparagus soup at the farm stand to participants in the Sustainable Eats Bike Tour*



*Peppers harvested at Homefield Farm were used in the 30<sup>th</sup> annual Dining Services Chili Challenge*

# On-Farm Research

Homefield Farm is the only certified organic land owned and operated by Virginia Tech, and serves as a valuable resource for field research on organic and sustainable crop production practices. The following research projects conducted by graduate students of Dr. Tom Kuhar, Department of Entomology, were integrated into Homefield Farm fields in 2020:

- Evaluation of novel organic pesticides for control of Colorado potato beetle in potato.
- Evaluation of aluminized plastic mulch for deterring cucumber beetle on squash and zucchini.
- Monitoring flea beetle population dynamics in cabbage.



*Potatoes just harvested and curing in the barn*

# Appendix

## Crop Production and Value

Below is the total yield and market value of crops grown at Homefield Farm and delivered to dining centers. Market value was assigned to each crop based on typical prices charged by Produce Source Partners (PSP), Virginia Tech's contract produce supplier. Pricing for local produce was used when available. For items not available locally, national pricing was used.

Crop	Category	Weight	Price	Total Value
Arugula	Salad Greens	40	\$3.50	\$140.00
Asparagus	Other	124.4	\$2.25	\$279.90
Basil	Herbs	791	\$7.00	\$5,537.00
Beets	Root Crops	124	\$1.00	\$124.00
Braising Greens	Salad Greens	109	\$2.00	\$218.00
Broccoli	Broccoli, Cauliflower, Cabbage	18	\$0.63	\$11.34
Cabbage, Green	Broccoli, Cauliflower, Cabbage	1488	\$0.25	\$372.00
Cabbage, Napa	Broccoli, Cauliflower, Cabbage	3108	\$0.75	\$2,331.00
Carrots	Root Crops	507	\$1.50	\$760.50
Cauliflower	Broccoli, Cauliflower, Cabbage	52	\$0.88	\$45.76
Cilantro	Herbs	441	\$7.00	\$3,087.00
Collards	Kale, Chard, Collards	980	0.72	705.6
Kale	Kale, Chard, Collards	96.25	0.72	69.3
Lettuce Mix	Salad Greens	188	2.2	413.6
Onions	Root Crops	43	0.75	32.25
Parsley	Herbs	212	7	1484
Peppers, Green	Peppers	379	0.76	288.04
Peppers, Hot	Peppers	23	1.05	24.15
Peppers, Red	Peppers	524.4	1.34	702.696
Potatoes, Red	Root Crops	2133	1.25	2666.25
Potatoes, White	Root Crops	3550	0.39	1384.5
Power Greens	Salad Greens	561.1	7	3927.7
Pumpkins and Gourds	Winter Squash and Pumpkins	888.5	0.5	444.25
Spinach	Salad Greens	422	1.8	759.6
Sweet Corn	Sweet Corn	945	0.35	330.75
Sweet Potatoes	Root Crops	5844	0.36	2103.84
Tomatoes, Cherry	Tomatoes	0	4	0
Tomatoes, Roma	Tomatoes	795	0.7	556.5
Watermelon	Watermelon	1009	0.2	201.8
Winter Squash, Buttercup	Winter Squash and Pumpkins	300	0.5	150
Winter Squash, Butternut	Winter Squash and Pumpkins	904	0.5	452
Winter Squash, Delicata	Winter Squash and Pumpkins	200	0.5	100
Winter Squash, Red Kuri	Winter Squash and Pumpkins	200	0.5	100
<b>Grand Total</b>		<b>26999.65</b>		<b>\$29,803.33</b>

# Appendix

## Farm Stand Sales

Crop	Category	Weight	Value
Basil	Herbs	1	\$8.00
Beets	Carrots and Beats	6	\$6.00
Broccoli	Broccoli, Cauliflower, Cabbage	12	\$12.00
Cabbage, Green	Broccoli, Cauliflower, Cabbage	12	\$8.00
Cabbage, Napa	Broccoli, Cauliflower, Cabbage	12	\$8.00
Carrots	Carrots and Beats	13	\$25.50
Cauliflower	Broccoli, Cauliflower, Cabbage	8	\$16.00
Chard, Swiss	Greens	0.75	\$2.50
Custom Amount	Misc.	2	\$6.00
Kale	Kale	5.25	\$13.50
Onions	Potatoes and Onions	27	\$33.00
Other	Misc.	31	\$31.00
Pepper, Hot	Peppers	2	\$9.50
Pepper, Red	Peppers	6.6	\$22.00
Potatoes, Red	Potatoes and Onions	24	\$36.00
Powergreens	Salad Greens	3.5	\$28.00
Pumpkins	Pumpkins and Winter Squash	181	\$134.00
Spinach	Salad Greens	7	\$48.00
Sunflower	Sunflowers	9	\$56.00
Sweet Potatoes	Potatoes and Onions	51	\$36.25
Tomatoes, Cherry	Tomatoes	5	\$30.00
Tomatoes, Roma	Tomatoes	10	\$15.00
Watermelon	Watermelon	91	\$52.00
Winter Squash, Butternut	Pumpkins and Winter Squash	96	\$53.00
<b>Grand Total</b>		<b>616.1</b>	<b>\$689.25</b>

# Appendix

## Expenses

Vendor	Category	Sub-Category	Jan	Feb	March	April	June	July	Aug	Sept	Oct	Nov	Total Cost	Purchase#
Seven Springs	Crop Inputs	Fertilizer, Pesticides and Cover Crops				\$4,119.25							\$4,498.25	Dining
Farm Supply	Crop Inputs			\$-						\$-	\$379.00		\$1,312.00	Dining
Harris Seeds	Crop Inputs	Seeds and Plants			\$-			\$131.20					\$1,312.00	Dining
Johnny's Seeds	Crop Inputs	Seeds and Plants	\$210.45		\$1,117.04		\$34.18	\$208.11					\$1,569.78	Dining
Jones Family Farms	Crop Inputs	Seeds and Plants		\$-			\$290.40						\$290.40	Dining
Maine Potato Lady	Crop Inputs	Seeds and Plants				\$1,288.26							\$1,288.26	Dining
Seedway LLC	Crop Inputs	Seeds and Plants			\$-							\$128.89	\$128.89	Dining
Amazon.com	Equipment and Supplies	Harvest and Post-Harvest Handling						\$44.00					\$44.00	Dining
Blacksburg True Value	Equipment and Supplies	Miscellaneous Supplies	\$68.76										\$68.76	Dining
Home Depot	Equipment and Supplies	Miscellaneous Supplies	433.04										433.04	SPES
Salem Stone	Equipment and Supplies	Miscellaneous Supplies		259.59									259.59	SPES
Tidy Services	Equipment and Supplies	Port-a-Potty	\$207.00			\$110.00		\$190.00	\$95.00	\$95.00	\$95.00	\$95.00	\$887.00	Dining
AM Leonard	Equipment and Supplies	Tools and Equipment								243.5			243.5	SPES
Kult Kress	Equipment and Supplies	Tools and Equipment					170.74						170.74	SPES
M&M Tire	Equipment and Supplies	Fuel, Vehicle Maintenance											733.12	SPES
GCS	Testing and Certification	Organic Certification				\$459.62					\$300.00		\$759.62	Dining

# Appendix

## Expenses: Fuel

	Transaction			
Vehicle	Date	Quantity	Total Cost	Mileage
Chevy S-10	6/3/20	11.52	15.55	M 22322
GMC Van	10/14/20	26.06	41.44	M 25598
GMC Van	9/28/20	10.85	16.27	M 25476
GMC Van	7/28/20	22.82	36.06	M 25148
GMC Van	6/16/20	21.19	30.73	M 24884
GMC Van	4/16/20	27.12	27.66	M 24591
GMC Van	3/5/20	18.88	34.36	M 24189
GMC Van	2/17/20	25.67	48	M 23891

# Appendix

## Summer Produce Request (for processing)

### SUMMER PROCESSING

	ITEM	NAME	ORDER THIS WEEK LB	STANDARD LB	DELIVERY DATE	NOTES
OWENS	1353	KF RHUBARB		125		
OWENS	1309	KF GREEN BEANS		100		
OWENS	1237	KF TOMATO ROMA		500		
WEM		BASIL		400		
WEM		CILANTRO		400		
WEM		PARSELY		400		
D2		CILANTRO		300		
D2		PARSELY		300		
TURNER	1149	KF CORN SHUCKED		640		for soup
TURNER	1237	KF TOMATO ROMA		3,000	Fridays	
TURNER	1353	KF RHUBARB		125	June	
TURNER	1003	KF ASPARAGUS		100		For soup
TURNER	1183	1297 KF COLLARDS		1,000		Harvested small
TURNER		BASIL		500		

# Appendix

## Fall Produce Request

UNIT	FOOD PRO #	ITEM NAME	STANDARD LB	DELIVERY DATE	NOTES
D2	1294	KF CARROTS SLICED	40	Monday	
D2	1284	KF CILANTRO	30	Monday	
D2	1183	KF KALE	40	Sunday	Rotate with Chard
D2	1184	KF LETTUCE MIX	6	Sunday	
D2	1184	KF LETTUCE MIX	6	Wednesday	
D2	????	KF PARSNIPS QUARTERED	10	Wednesday	Or sweet potatoes
D2	1367	KF POTATO WHITE QUARTERED	50	Wednesday	
D2	1366	KF POTATO RED QUARTERED	50	Wednesday	
D2	1203	KF POWER GREENS MIX	25	Sunday	
D2	1203	KF POWER GREENS MIX	25	Wednesday	
D2	1329	KF BUTTERNUT PEELED/CUBED	40	Wednesday	
D2	1223	KF SWEET POTATO	150	Monday	
D2	1343	KF SWISS CHARD	40	Sunday	Rotate with Kale
D2	1327	KIF WATERMELON SLICED	50	Saturday	
OWENS	1143	KF BEETS	10	Sunday	
OWENS	1178	KF CABBAGE GREEN	10	Sun	
OWENS	1294	KF CARROTS SLICED	80	Thursday	
OWENS	1180	KF CAULIFLOWER	20	Thursday	
OWENS	1183	KF KALE	20	Sun	
OWENS	1331	KF KHOLRABI	10	Friday	
OWENS	1184	KF LETTUCE MIX	10	Sun	only 20 pounds salad total
OWENS	1184	KF LETTUCE MIX	10	Wednesday	only 20 pounds salad total
OWENS	1186	KF PEPPER RED	10	Monday	
OWENS	1367	KF POTATO WHITE QUARTERED	80	Monday	
OWENS	????	KF POTATO WHITE DICED	80	Monday	
OWENS	1366	KF POTATO RED QUARTERED	80	Monday	
OWENS	????	KF POTATO RED DICED	80	Monday	
OWENS	1203	KF POWER GREENS MIX	10	Sun	only 20 pounds salad total
OWENS	1203	KF POWER GREENS MIX	10	Wednesday	only 20 pounds salad total
OWENS	1278	KF PUMPKIN/GOURD			
OWENS	1278	KF PUMPKIN/GOURD			
OWENS	1376	KF SPINACH	10	Sun	only 20 pounds salad total
OWENS	1376	KF SPINACH	10	Wednesday	only 20 pounds salad total
OWENS	1279	KF BUTTERCUP	10	Friday	
OWENS	1329	KF BUTTERNUT PEELED/CUBED	10	Friday	
OWENS	1281	KF RED KURI	10	Friday	
OWENS	1344	KF SWEET POTATO QUARTERED	10	Monday	
OWENS	1343	KF SWISS CHARD	20	Sun	
OWENS	1237	KF TOMATO ROMA	20	Sun	

*Continued on next page*

# Appendix

## Fall Produce Request

Continued from previous page

UNIT	FOOD PRO #	ITEM NAME	STANDARD LB	DELIVERY DATE	NOTES
TURNER	1143	KF BEETS	20	Sunday	
TURNER	1375	KF BRAISING GREENS	80	Sunday	
TURNER	1388	KF NAPA CABBAGE SLICED	400	Sunday	
TURNER	1179	KF CARROTS	80	Thursday	
TURNER	1297	KF COLLARDS	1,000	Summer	For processing
TURNER	1183	KF KALE	240	Sunday	*Rotate
TURNER	1184	KF LETTUCE MIX	90	Sunday	
TURNER	1184	KF LETTUCE MIX	90	Wednesday	
TURNER	????	KF PARSNIPS	20	Friday	
TURNER	1187	KF PEPPER POBLANO	20	Monday	
TURNER	1363	KF POTATO WHITE	200	Monday	
TURNER	1361	KF POTATO RED	200	Monday	
TURNER	1203	KF POWER GREENS MIX	30	Sunday	
TURNER	1203	KF POWER GREENS MIX	30	Wednesday	
TURNER	1376	KF SPINACH	20	Sunday	
TURNER	1376	KF SPINACH	20	Monday	
TURNER	1376	KF SPINACH	20	Tuesday	
TURNER	1376	KF SPINACH	20	Wednesday	
TURNER	1283	KF SPINACH	20	Thursday	
TURNER	1325	KF SWEET POTATOES PEELED	300	Wednesday	*Will go to Mon. deliv. next week
TURNER	1343	KF SWISS CHARD	240	Sunday	*Rotate
TURNER	1237	KF TOMATO ROMA	400	Sunday	
WEM	1294	KF CARROTS SLICED	25	Monday	
WEM	1294	KF CARROTS SLICED	25	Thursday	
WEM	1284	KF CILANTRO	10	Friday	
WEM	1184	KF LETTUCE MIX	10	Sunday	
WEM	1184	KF LETTUCE MIX	10	Wednesday	
WEM	1203	KF POWER GREENS MIX	35	Sunday	Sample required
WEM	1203	KF POWER GREENS MIX	35	Wednesday	Sample required
WEM	1376	KF SPINACH	35	Sunday	Sample required
WEM	1376	KF SPINACH	35	Wednesday	Sample required
WEM	1280	KF BUTTERNUT	0	Friday	For LTO
WEM	1281	KF RED KURI	0	Friday	For LTO
WEM	1398	KF GOLDEN BEETS PEELED/CHOPPED	10	Sunday	
WEM	1387	KF RED BEETS PEELED/CHOPPED	10	Sunday	
WEM	1281	KF RED KURI	0	Friday	For LTO
SOUTHGATE	1178	CABBAGE GREEN	900	Thursday	For substitution
SOUTHGATE	1185	KF PEPPER GREEN	900	Thursday	For substitution

# Appendix

## Field Map

Below is a graphic representation of the fields and crop locations

Roadway	O-15	FALL CORN, WATERMELON, CHARD, SUNFLOWER (+ 1 extra bed cabbage)									
	O-14	FALL BRASSICA									
	O-13	CC									
	O-12	FALL ROOT									
	O-11	FALL ROOT									
	O-10	CC									
	O-9	SPRING ROOT, HERBS, double crop salad greens									
	O-8	FALL BRASSICA									
	O-7	CC									
	O-6	SPRING CORN, HERB, ONION									
	O-5	CC									
	O-4	CC									
	O-3	Squash/pumpkin									
	O-2	Peppers									
	O-1	ASPARAGUS									
	C-15	OROURKE FLOWERS									
	C-14	CC									
	C-13	CC									
	C-12	SWEET POTATO									
	C-11	CC									
	C-10	OROURKE FLOWERS									
	C-9	CC									
	C-8	CC									
	C-7	FALL SALAD GREENS									
	C-6	FALL SALAD GREENS									
	C-5	POTATO									
C-4	CC										
C-3	POTATO										
C-2	OROURKE FLOWERS										
C-1	MOVEABLE HIGH TUNNEL										
Demo	DEMO										

# Appendix

## Farm Map

