# Homefield Farm
## at Kentland Farm

# 2017 Annual Report

STUDENT AFFAIRS DINING SERVICES VIRGINIA TECH.

VIRGINIA TECH SUSTAINABILITY

COLLEGE OF AGRICULTURE AND LIFE SCIENCES HORTICULTURE VIRGINIA TECH.

COLLEGE OF AGRICULTURE AND LIFE SCIENCES VIRGINIA TECH.

# Acknowledgments

Susan Clark, Associate Professor, Horticulture; Director, CAFS Minor
Ted Faulkner, Director, Dining Services
John James, UHC Facilities Manager, Horticulture
Tom Kuhar, Professor, Entomology
Megan O'Rourke, Assistant Professor, Horticulture
Anthony Purcell, Assistant Director for Southgate, Dining Services
Holly Scoggins, Associate Professor, Horticulture
Susan Sumner, Associate Dean of Academic Programs, CALS
Richard Veilleux, Department Head (former), Horticulture
Jon Wooge, Kentland Farm Agricultural Manager (former), CALS
Homefield Farm crew, Dining Services
Sustainable Agriculture Practicum students

Photographs courtesy of Victoria Boatwright, Gwyneth Manser, Jud Froelich, Virginia Tech University Relations, Darren Van Dyke, and Alex Hessler.

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## Appendix



*Students in the Sustainable Agriculture Practicum Class unload soil amendments for use on the fields during spring planting at Homefield Farm. The class gives Virginia Tech students the chance to engage in hands-on experiential learning on a small-scale farm.*

# Letter from the Farm Director

**The cyclical nature of farming** imparts a familiar repetition of tasks, challenges, and rewards to each growing season. This continual opportunity to relive, adapt, and refine our work is a great source of excitement and hope. The creativity and passion of the people behind Homefield Farm is the fuel that drives and sustains this ongoing process. Having now had the privilege of serving as the farm's director for four years, I have witnessed the diverse roles that so many people have had in shaping what Homefield Farm has become.

This year we said goodbye to Jon Wooge, who retired after serving as the Kentland Farm manager for thirty years. Jon's technical support of Homefield Farm and his thoughtful contribution to envisioning the farm's future has enabled critical expansions to the farm's production space and infrastructure. We also welcomed Gwyneth Manser as the new sustainability manager for Dining Services and Housing and Residence Life. Gwyneth's facilitation skills and marketing savvy have strengthened ties amongst new and existing stakeholders, and have helped to polish our outreach efforts to students on campus. Gwyneth took over for Rial Carver, who provided invaluable leadership to the farm and other sustainability initiatives in Dining Services from 2013-2016. The passing of time is also marked by the faces of the many students that I have the privilege of teaching, working with, and learning from at Homefield Farm each year. It is the contribution of so many stakeholders, students, faculty, and staff to Homefield Farm's mission that truly makes 2017 stand out.

Sincerely,

*Alex Hessler, Homefield Farm Director*

# Executive Summary

## A Year in Review

Homefield Farm is an educational farm at Virginia Tech, and is located at Kentland Farm and managed collaboratively by Virginia Tech Dining Services, the Department of Horticulture, and the College of Agriculture and Life Sciences (CALS). The six-acre farm grows fruits, vegetables and herbs for Virginia Tech Dining Services, and serves as a site of experiential student learning, interdisciplinary research, and community outreach. Homefield Farm also operates a high tunnel at the Urban Horticulture Center for season-extended vegetable production. All produce grown at Homefield Farm is served on campus by Dining Services.

Homefield Farm is a flagship initiative in Dining Services' efforts to increase local and sustainable food sourcing. Crop production at Homefield Farm totaled 37,457 pounds in 2017, with a wholesale market value of $35,534.50. 2017 operating costs for Homefield Farm totaled $24,813.42 (page 3). Fall 2017 saw the integration of farm produce with the food management system used by Dining Services, thus streamlining the movement of produce from farm to campus (page 11).

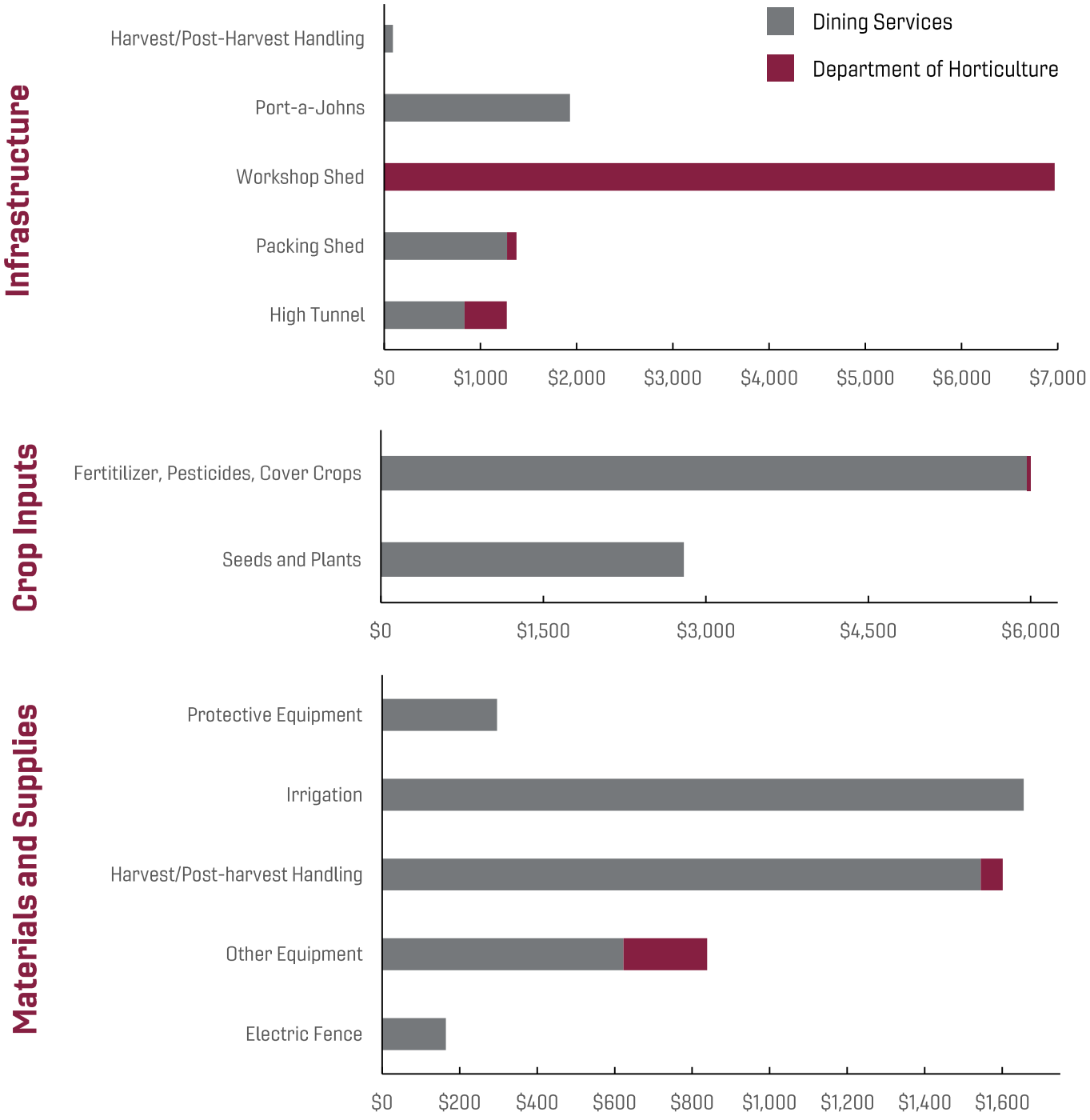
Homefield Farm is also a resource for experiential education, outreach, and research around sustainable agriculture and food systems for CALS. Since 2014, Homefield Farm has hosted the Sustainable Agriculture Practicum, a hands-on course in sustainable vegetable production offered by the School of Plant and Environmental Sciences. Twenty-five students participated in the course in 2017 (page 5). During 2017, Homefield Farm also hosted six educational farm tours for Virginia Tech students and members of the public, and three CALS faculty and graduate student-led research projects were integrated into Homefield Farm production fields (pages 6-7).

It bears mentioning that in spring of 2018, we saw a huge milestone achieved in the renaming of the farm. Previously known as the "Dining Services Farm", the farm was renamed "Homefield Farm" to better reflect the academic/auxiliary partnership that allows the farm to operate and thrive. The new name was developed through collaboration with the Homefield Farm Steering Committee and the marketing teams from Dining Services and CALS.

# 2017 in Numbers

## Operating Expenses

2017 operating costs for Homefield Farm totaled $24,813.42. Dining Services contributed $17,503,55 (71%), and the Department of Horticulture contributed $7,309.87 (29%). Labor costs are not included (page 16), nor are research and University-related grants that benefited farm operations (page 6).

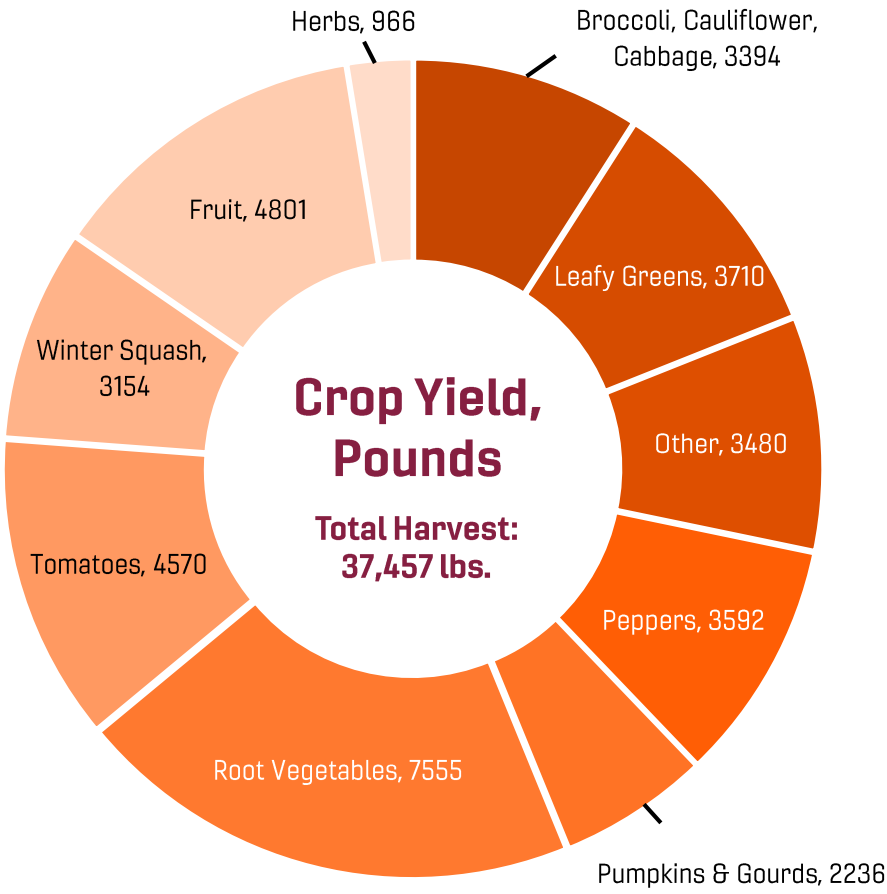


# 2017 in Numbers

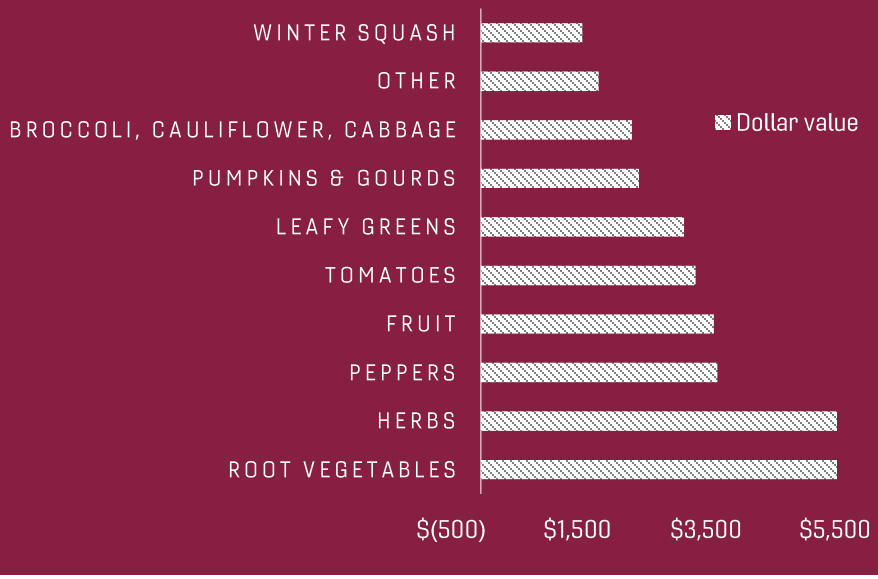
## Crop Production and Value

All of the produce grown at Homefield Farm is served in the dining centers on Virginia Tech's campus. Each spring, the Dining Services sustainability manager and Homefield Farm's director collaborate with the chefs and food production managers to determine crop needs, and to schedule production for the upcoming growing season.

In 2017, 37,457 pounds of produce were harvested at Homefield Farm. The total value of crops harvested was $35,534.50. Information on crop valuation methodology and a list of individual crops grown can be found on page 13. Root vegetables represent the most significant crop both by weight and by market value. Herbs represent the smallest proportion of the harvest by weight, but they represent the second highest market value crop grown and harvested at Homefield Farm.




## Market Value by Category




## Summary Statistics

**Market value:**
**$35,534.50**

**Dining expenses:**
**$17,503.55**

**Horticulture expenses:**
**$7,309.87**

# Impact

## Student Engagement and Academic Participation

Student engagement and academic participation are the backbone of Homefield Farm. The farm is a vibrant part of campus life, with classes, tours, and volunteer opportunities allowing students to truly engage with the logistics of farm-to-institution growing and sourcing.

### The Sustainable Agriculture Practicum

The Sustainable Agriculture Practicum is a three-credit experiential course in sustainable vegetable production that takes place at Homefield Farm and the Urban Horticulture Center. In 2017, twenty-five students representing thirteen majors participated in this unique field-based learning experience. Students participate in all aspects of managing the farm, including soil preparation, planting, weeding, pest management, irrigation, and harvest. Lectures and discussions strengthen field experiences by exploring the complexities of soil health and fertility, plant growth, production planning, and economic considerations in small farm management. Students from diverse backgrounds and majors across campus gain meaningful insight into the challenges and opportunities of sustainable agriculture and local food systems. Their important role in growing food for Dining Services furnishes a sense of pride and responsibility as members of the Virginia Tech community.

*Students in the Sustainable Agriculture Practicum learning to weed spring garlic (left); Homefield Farm plots being used for local pollinator research (right).*

### Civic Agriculture and Food Systems Minor

The Civic Agriculture and Food Systems (CAFS) minor is a foundational partner to Homefield Farm, having provided early funding when the farm first began in 2009. Homefield Farm is a living laboratory for students in the minor to explore the application of community-based food and farming systems in a university setting. Many students in the minor complete service hours at Homefield Farm each year.

# Impact

## Student Engagement and Academic Participation

### Volunteers

Thank you to the members of the Nu Kappa Epsilon service sorority and the Food Justice Club at Virginia Tech for volunteering at the farm during the spring and fall semesters.

### Class Tours

- Virginia Tech Summer Academy: Animal and Poultry Sciences Track
- Virginia Summer Residential Governor's School for Agriculture
- Introduction to Civic Agriculture (ALS 2204)
- Home Gardening (HORT 2984)

### Research Partnerships and Support

Homefield Farm is a valuable field site for applied research on various dimensions of sustainable agriculture systems. Students and faculty in multiple departments in the College of Agriculture and Life Sciences are encouraged to integrate experiments into production fields, and often receive technical support from Homefield Farm personnel. In 2017, Dr. Tom Kuhar and graduate students in the Virginia Tech Vegetable Entomology Lab conducted three experiments in Homefield Farm crops:

- Living mulches to improve weed management and soil quality in Virginia fresh market tomato production.
  *Alex Hessler, Tom Kuhar*

- Evaluating IPM strategies for brown marmorated stink bug in bell pepper.
  *Hayley Bush, Entomology graduate student*

- Evaluating IPM strategies for corn earworm in sweetcorn.
  *John Few, Entomology graduate student*

### Grants:

Farm director Alex Hessler was awarded $7,095 by the Virginia Agricultural Council for the research project entitled "Living mulches to improve weed management and soil quality in Virginia fresh market tomato production." Beefsteak and roma tomatoes gleaned from the research project were served in campus dining centers.

# Impact

## Public Engagement

### Outreach and Tours

- **Dining Services Culinary Camp.** Farm Tour - June 26, July 10 & 18.
- **Virginia Master Gardener College.** Tour of Homefield Farm & Urban Horticulture Center high tunnel - June 22.
- **Virginia Beginning Farmer and Rancher Coalition.** Twilight Farm Tour: Homefield Farm at Kentland Farm- June 06.

*The Twilight Farm Tour group walking by the "living mulch" experiment (top); the Twilight Farm Tour group learning about corn planting methods at Homefield Farm (bottom right); The Virginia Master Gardener College tour of Homefield Farm (bottom left).*

# Impact

## Special Events

### Chef's Premiere Dinner: An Evening at Kentland Farm

During Virginia Tech Family Weekend in October, families were invited to enjoy an evening at Kentland Farm replete with hors d'oeuvres, farm tour, Hokie stone campfire, and a three course meal prepared by Dining Services chefs featuring Homefield Farm-grown vegetables and Virginia Tech Meats.



*A fresh vegetable display (top left); a student serving themselves fresh fruit (top middle); Vice President of Student Affairs Patty Perillo getting food at one of the action stations (top right); Hokies enjoying their farm to table meal at Homefield Farm.*

# Impact

## Special Events

### Fall Harvest Celebration Meal

Each autumn, students, staff, and faculty from Dining Services, the Department of Horticulture, and CALS gather at Kentland Farm to celebrate the collaborative spirit that drives Homefield Farm. The chefs from Owens Food Court prepared a farm-to-table meal featuring Homefield Farm produce and Virginia Tech Meats, including their famous butternut squash lasagna (featuring Homefield Farm-grown squash).

*Dining Services farm crew member Becca enjoying the fruits of her labor—Homefield Farm cabbage slaw, Homefield Farm butternut squash lasagna, Virginia Tech Meats chicken, and Homefield Farm potatoes.*

### Virginia Tech Earth Week Pop-Up Farmers Market

As part of Virginia Tech's Earth Week celebration, Virginia Tech Sustainable Dining joined local vendors and the Office of Sustainability in participating in a pop-up farmers market on the Virginia Tech Drillfield. The event featured samples from Farms & Fields in Owens Food Court, Dining's premiere local and sustainable dining location. Samples included an organic kale salad and marinated asparagus from Homefield Farm. Additionally, Gwyneth Manser and Alex Hessler tabled to promote sustainable dining at Virginia Tech. Free Homefield Farm tomato starts and reusable to-go keychains were distributed to students, faculty, and staff during the event.


# Impact

## Special Events

### D2 Fall Harvest Fair

Food and games adorned the lawn for an evening during the D2 Fall Harvest Fair in October. Students bowled for prizes with Homefield Farm pumpkins (upper left, below) and enjoyed fresh Kentland Farm apple cider pressed by students in the Sustainable Agriculture Practicum (lower left and right, below).

### Potluck and Cider Pressing

After harvesting the last crops and preparing the farm for winter, students in the Sustainable Agriculture Practicum celebrated the end of another successful farming season with a potluck and cider pressing at the Urban Horticulture Center.

# Ongoing Progress and Goals

## Progress

Every year Homefield Farm evolves and grows to become more efficient, productive, and sustainable. Below are some of the achievements of the 2017 farm season:

- Beginning in fall of 2017, all ordering of produce from Homefield Farm by dining centers was integrated into FoodPro, Dining Services' computerized ordering system. This improvement streamlined the ordering process, dramatically improving the ease and timeliness of communication between the farm and kitchen staff.

- Homefield Farm coordinated with researchers at Kentland Farm to shift production fields to a location proximate to the farm entrance, equipment barn, and packing shed. The move promotes greater visibility and accessibility of Homefield Farm to students, farm workers, and the public.

- A mechanical transplanter designed by emeritus professor Ron Morse was refurbished and used at Homefield Farm for the first time this year to transplant vegetable crops. The implement simultaneously distributes fertilizer, deposits drip tape for irrigation, and waters young plants.

- With support from the College of Agriculture and Life Sciences, a dilapidated pole barn used by Homefield Farm was demolished in summer 2017. The footprint of the demolished building will serve as the site for a new pole barn to be constructed in the future. Fundraising for the new barn is ongoing.

*Locally raised trout with wild rice and Homefield Farm-grown tri-colored carrots from Virginia Tech Dining Service's West End Market (left); students utilizing the mechanical transplanter to facilitate transplanting in spring (right).*


*Virginia Beginning Farmer and Rancher Coalition Twilight Farm Tour at Homefield Farm.*

# Ongoing Progress and Goals

## Goals

Since its inception in 2009, Homefield Farm has continually grown and evolved, guided by a vision of the farm as a model for agricultural education and institutional sustainability. Our major goals for the 2018 season are listed below:

### Good Agricultural Practices

Food safety and sanitation are paramount principles of Virginia Tech Dining Services, and are no less critical in the operation of Homefield Farm. Farm personnel have partnered with the Virginia Tech Fresh Produce Food Safety Team to develop and implement Good Agricultural Practices (GAP) at Homefield Farm that identify and mitigate on-farm food safety risks. The farm will undergo a third-party GAP audit in the near future to verify adherence to these important standards and practices.

### Organic Certification

Homefield Farm has been managed without the use of inputs prohibited by the National Organic Program since 2009. The farm will apply for Organic Certification in the 2018 season.

# Appendix

## Crop Production and Value

Below are the crop production and market values for the 2017 Homefield Farm harvest. 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 (typically from California-grown produce) was used.

| Crop | Pounds Harvested | PSP Market Value (per lb.) | Harvest Value | Price Reference |
|---|---|---|---|---|
| Asparagus | 128.65 | $2.25 | $289.46 | PSP Local |
| Beans, Green | 334 | $1.00 | $334.00 | PSP Local |
| Beets | 597 | $0.64 | $382.08 | PSP Local |
| Bok Choi | 6.4 | $0.87 | $5.57 | PSP Local |
| Broccoli | 1523 | $0.63 | $959.49 | PSP Local |
| Cabbage, Napa | 31 | $0.87 | $26.97 | PSP Local |
| Cabbage, Green | 140 | $0.24 | $33.60 | PSP Local |
| Cabbage, Red | 60 | $0.32 | $19.20 | PSP Local |
| Carrots, tri-colored | 772 | $1.08 | $833.76 | PSP National |
| Cauliflower | 1640 | $0.80 | $1,312.00 | PSP Local |
| Corn, Sweet | 2970 | $0.35 | $1,039.50 | PSP Local |
| Garlic Scapes | 47 | $3.60 | $169.20 | PSP Local |
| Swiss Chard | 1513 | $0.90 | $1,361.70 | PSP Local |
| Kale | 2067 | $0.69 | $1,426.23 | PSP Local |
| Lettuce Mix | 44 | $2.95 | $129.80 | PSP National |
| Peppers, Bell Green | 2335 | $0.76 | $1,774.60 | PSP Local |
| Peppers, Ghost | 10 | $31.00 | $310.00 | PSP National |
| Peppers, Habanero | 20 | $2.40 | $48.00 | PSP Local |
| Peppers, Jalapeno | 40 | $1.05 | $42.00 | PSP Local |
| Peppers, Poblano | 1115 | $1.25 | $1,393.75 | PSP Local |
| Peppers, Serrano | 42 | $1.50 | $63.00 | PSP Local |
| Peppers, Thai Chili | 30 | $1.50 | $45.00 | PSP Local |
| Potatoes, Fingerling | 3815 | $1.25 | $4,768.75 | PSP National |
| Power Greens Mix | 80 | $2.95 | $236.00 | PSP National |
| Pumpkins/Gourds | 1679 | $0.80 | $1,343.20 | PSP Local |
| Giant Pumpkin | 557 | $2.00 | $1,114.00 | PSP National |
| Radishes | 8.5 | $2.00 | $17.00 | PSP National |
| Rutabaga | 150 | $0.57 | $85.50 | PSP National |
| Sweet Potatoes | 2170 | $0.30 | $651.00 | PSP Local |
| Tomato, Roma (Field) | 1418 | $0.70 | $992.60 | PSP Local |
| Tomato, Roma (High Tunnel) | 2148 | $0.70 | $1,503.60 | PSP Local |
| Tomato, Beefsteak | 1004 | $0.84 | $843.36 | PSP Local |
| Turnip, Storage | 30 | $0.50 | $15.00 | PSP Local |
| Turnip, Salad | 12.8 | $0.70 | $8.96 | PSP Local |
| Winter Squash, Buttercup | 742 | $0.50 | $371.00 | PSP Local |
| Winter Squash, Butternut | 1205 | $0.50 | $602.50 | PSP Local |
| Winter Squash, Red Kuri | 1207 | $0.50 | $603.50 | PSP Local |
| Apples | 950 | $0.70 | $665.00 | PSP Local |
| Peaches | 1219 | $1.08 | $1,316.52 | PSP Local |
| Rhubarb | 232 | $3.55 | $823.60 | PSP National |
| Watermelon | 2400 | $0.34 | $816.00 | PSP Local |
| Basil | 557 | $7.00 | $3,899.00 | PSP Local |
| Chives | 5 | $7.00 | $35.00 | PSP Local |
| Cilantro | 212 | $7.00 | $1,484.00 | PSP Local |
| Dill | 20 | $7.00 | $140.00 | PSP Local |
| Mint | 33.5 | $7.00 | $234.50 | PSP Local |
| Oregano | 32 | $7.00 | $224.00 | PSP Local |
| Parsley | 46 | $7.00 | $322.00 | PSP Local |
| Rosemary | 52 | $7.00 | $364.00 | PSP Local |
| Thyme | 8 | $7.00 | $56.00 | PSP Local |

# Appendix

## Expenses: Department of Horticulture

| Date | Price | Vendor | Category | Subcategory |
|---|---|---|---|---|
| 3/4 | $ 99.00 | Agsquared | Materials and Supplies | Other Equipment |
| 3/22 | $ 29.95 | Greely Good Products | Infrastructure | Packing Shed |
| 3/28 | $ 36.00 | VT Soil Test Lab | Crop Inputs | Fertilizer, Pesticides, Cover Crops |
| 4/29 | $ (44.88) | Heaveners | Materials and supplies | Tools |
| 4/29 | $ (8.49) | Heaveners | Materials and supplies | Irrigation |
| 6/16 | $ 14.48 | Heaveners | Infrastructure | Packing Shed |
| 6/19 | $ 16.99 | Heaveners | Materials and supplies | Other Equipment |
| 6/30 | $ 28.06 | Heaveners | Materials and supplies | Other Equipment |
| 7/10 | $ 6,967.00 | VT Renovations Dept | Infrastructure | Irrigation |
| 7/11 | $ 8.85 | Heaveners | Materials and supplies | Irrigation |
| 7/11 | $ (21.36) | Heavenrs | Materials and supplies | Packing Shed |
| 7/15 | $ 16.46 | Home Depot | Infrastructure | Other Equipment |
| 8/15 | $ 20.55 | Heaveners | Materials and supplies | Other Equipment |
| 8/15 | $ 35.00 | Long Shop Auto | Materials and supplies | Packing Shed |
| 8/19 | $ 39.47 | Lowes | Infrastructure | Harvest/Post-harvest Handling |
| 9/8 | $ 51.22 | Lowes | Materials and supplies | Harvest/Post-harvest Handling |
| 9/21 | $ 5.79 | CVS Pharmacy | Materials and supplies | Other Equipment |
| 10/24 | $ 7.89 | Heaveners | Materials and supplies | Other Equipment |
| 10/30 | $ 7.89 | Heaveners | Materials and supplies | Workshop Shed |

# Appendix

## Expenses: Dining Services

| Date | Price | Vendor | Category | Subcategory |
|---|---|---|---|---|
| N/A | $ 382.38 | Fleet Services/James River Fuel | Fuel | Materials and Supplies |
| N/A | $ 1,931.00 | Tidy Services | Port-a-Johns | Infrastructure |
| 2/2 | $ 139.60 | Gempler's Inc | Packing Shed | Infrastructure |
| 2/2 | $ 415.47 | Gempler's Inc | Harvest/Post-harvest Handling | Materials and Supplies |
| 3/6 | $ 835.00 | Rimol Greenhouse Systems Inc | High Tunnel | Infrastructure |
| 3/7 | $ 239.80 | Harris Seeds | Seeds and Plants | Crop Inputs |
| 3/7 | $ 13.95 | Harris Seeds | Seeds and Plants | Crop Inputs |
| 3/8 | $ 595.80 | Johnny's Selected Seeds | Seeds and Plants | Crop Inputs |
| 3/8 | $ 80.84 | Supplies for door repair | Packing Shed | Infrastructure |
| 4/4 | $ 275.08 | Uline Inc | Harvest/Post-harvest Handling | Materials and Supplies |
| 4/5 | $ 1,500.00 | Royal Oak Farm LLC Compost | Fertilizer, Pesticides, Cover Crops | Crop Inputs |
| 4/10 | $ 19.85 | Johnny's Selected Seeds | Seeds and Plants | Crop Inputs |
| 4/17 | $ 13.40 | Johnny's Selected Seeds | Seeds and Plants | Crop Inputs |
| 4/18 | $ 1,655.23 | Berry Hill Irrigation, Inc. | Irrigation | Materials and Supplies |
| 4/20 | $ 141.65 | W W Grainger Inc | Other Equipment | Materials and Supplies |
| 4/26 | $ 4,177.90 | 7 Springs Farm Organic Farming | Fertilizer, Pesticides, Cover Crops | Crop Inputs |
| 5/22 | $ 193.75 | FARMTEK AS | Other Equipment | Materials and Supplies |
| 5/22 | $ 64.00 | NOR NORTHERN TOOL AS | Other Equipment | Materials and Supplies |
| 6/1 | $ 515.38 | Gempler's Inc | Harvest/Post-harvest Handling | Materials and Supplies |
| 6/1 | $ 353.00 | Nourse Farms Inc | Seeds and Plants | Crop Inputs |
| 6/12 | $ 198.00 | Jones Family Farms | Seeds and Plants | Crop Inputs |
| 6/16 | $ 321.35 | THE WEBSTAURANT STORE AS | Harvest/Post-harvest Handling | Materials and Supplies |
| 7/8 | $ 43.99 | W W Grainger Inc | Packing Shed | Infrastructure |
| 7/10 | $ 249.90 | Johnny's Selected Seeds | Seeds and Plants | Crop Inputs |
| 7/11 | $ 1,218.00 | Fedco Seeds | Seeds and Plants | Crop Inputs |
| 7/11 | $ 12.00 | W W Grainger Inc | Harvest/Post-harvest Handling | Materials and Supplies |
| 7/17 | $ 135.00 | CropKing Inc | Fertilizer, Pesticides, Cover Crops | Crop Inputs |
| 7/17 | $ 40.35 | CropKing Inc | Fertilizer, Pesticides, Cover Crops | Crop Inputs |
| 7/20 | $ 164.25 | KENCOVE FENCE AS | Electric Fence | Materials and Supplies |
| 8/17 | $ 31.79 | AMAZON MKTPLACE PMTS AS | Packing Shed | Infrastructure |
| 8/17 | $ 136.30 | Fedco Seeds | Seeds and Plants | Crop Inputs |
| 8/24 | $ 112.00 | 7 Springs Farm Organic Farming | Fertilizer, Pesticides, Cover Crops | Materials and Supplies |
| 8/24 | $ 5.00 | 7 Springs Farm Organic Farming | Harvest/Post-harvest Handling | Materials and Supplies |
| 9/6 | $ 90.00 | Clear Creek Water Works LLC | Harvest/Post-harvest Handling | Infrastructure |
| 12/15 | $ 978.89 | CLEAR CREEK WATER WORK AP | Packing Shed | Infrastructure |
| 12/15 | $ 223.65 | LEHMAN'S - DIRECT SALE AS | Other Equipment | Materials and Supplies |
| 2/2 | $ 139.60 | Gempler's Inc | Packing Shed | Infrastructure |

# Appendix

## Expenses: Dining Services

### Fuel Usage

| Date | Location | Fuel Amount | Cost |
|---|---|---|---|
| 01/26 | Fleet Services | 11.85 | $ 22.40 |
| 05/12 | Fleet Services | 27.43 | $ 54.04 |
| 05/23 | Fleet Services | 10.14 | $ 20.58 |
| 07/18 | Fleet Services | 25.19 | $ 48.36 |
| 08/02 | Fleet Services | 12.68 | $ 24.09 |
| 08/23 | Fleet Services | 23.36 | $ 45.55 |
| 09/26 | Fleet Services | 26.75 | $ 65.27 |
| 06/15 | Fleet Services | 15.50 | $ 32.39 |
| 03/06 | James River Fuel | N/A | $ 18.84 |
| 04/06 | James River Fuel | N/A | $ 50.86 |
| | | Total: | $ 382.38 |

### Summer Farm Crew Labor

From mid-May to early August, labor at the farm is provided by a summer crew of salaried Dining Services staff. In the summer of 2017, the eight-person crew worked approximately 1,341 hours. The total cost of summer labor, excluding benefits, was approximately $15,113.17.

| Employee (names withheld) | # Days Worked | # Hours Worked | Hourly Rate | Summer Salary |
|---|---|---|---|---|
| NW | 28 | 209.67 | 10.43 | $ 2,186.86 |
| NW | 29 | 231.75 | 12.07 | $ 2,797.22 |
| NW | 8 | 61 | 11.47 | $ 699.67 |
| NW | 16 | 120 | 11.76 | $ 1,411.20 |
| NW | 7 | 52.25 | 11.00 | $ 574.75 |
| NW | 25 | 192 | 11.60 | $ 2,227.20 |
| NW | 33 | 242.75 | 11.76 | $ 2,854.74 |
| NW | 30 | 231.75 | 10.19 | $ 2,361.53 |
| | | | Total: | $ 15,113.17 |

# Appendix

## Produce Delivery Log

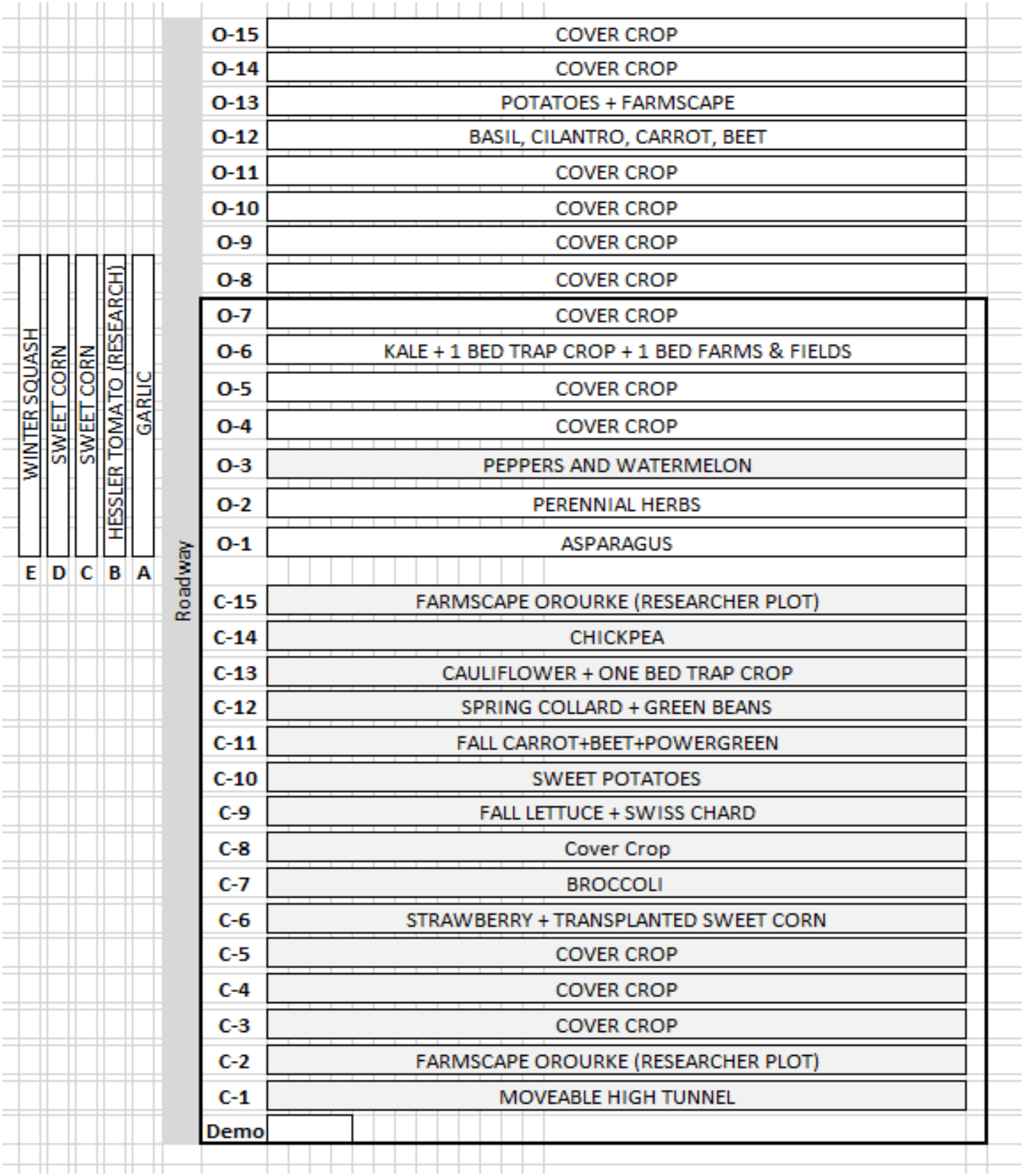
| DATE: | | TIME: | | | | | | | | DRIVER: | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNIT NEEDS PER WEEK (LB) | | | | | | | | | | | |
| Crop | Field Number | OWENS | WEM | D2 | TURNER | PTC | SG | Total | Total Weight | # of Bins | Notes: | Received (Y/N) |
| Beets | | 40 | 40 | | 20 | | | 100 | | | | |
| Broccoli | | 120 | | 240 | | | | 360 | | | | |
| Cabbage, Green | | 20 | | | | | | 20 | | | | |
| Carrots | | 40 | 40 | 60 | 20 | | | 160 | | | | |
| Cauliflower | | 20 | 120 | 20 | | | | 160 | | | | |
| Kale/ Swiss Chard | | 40 | | 40 | 240 | | 20* | 320 | | | 20* extra just in case | |
| Lettuce Mix | | 20 | | | 40 | | | 60 | | | | |
| Pepper, Green Bell | | 20 | | | | | | 20 | | | SG uses 800 green bell/week | |
| Pepper, Red Bell | | 20 | | | | | | 20 | | | SG uses 900 red bell/week | |
| Pepper, Poblano | | 40 | | 40 | 40 | | | 120 | | | D2 Chili Challenge | |
| Pepper, Serrano | | | | 50 | 2 | | | 52 | | | D2 Chili Challenge | |
| Pepper, Jalepeno | | | | 40 | | | | 40 | | | D2 Chili Challenge | |
| Pepper, Thai Chili | | | | 30 | | | | 30 | | | D2 Chili Challenge | |
| Pepper, Habenero | | | | 20 | | | | 20 | | | D2 Chili Challenge | |
| Pepper, Ghost | | | | 10 | | | | 10 | | | D2 Chili Challenge | |
| Fingerlings: yellow/purple | | 80 | 40 | 200 | 80 | | | 400 | | | Alternate yellow and purple | |
| Power Greens Mix | | 20 | 80 | | | | | 100 | | | | |
| Sweet Potatoes | | 80 | | 200 | 400 | | | 680 | | | D2 small, Owens and Turner big | |
| Tomatoes, Roma | | 80 | | | 400 | | | 480 | | | | |
| Tomatoes, Grape | | 12 | 12 | | | | | 24 | | | 1 flat = 12 pints, 1 pint = 1 lb. | |
| Pumpkins & Gourds | | | | | | | | | | | | |
| Winter Squash, Buttercup | | 20 | 40 | 60 | | | | 120 | | | | |
| Winter Squash, Butternut | | 30 | | 160 | 50 | | | 240 | | | D2 every other week | |
| Winter Squash, Red Kuri | | 20 | 20 | 60 | 20 | | | 120 | | | | |
| Farms and Field Box | | | | | | | | | | | | |
| **Fruits:** | | | | | | | | | | | | |
| Apples | | 40 | 80 | | 40 | | | 160 | | | | |
| **Herbs:** | | | | | | | | | | | | |
| Cilantro | | | | | | | | | | | | |
| Parsley | | | | | | | | | | | | |
| Chives | | | | | | | | | | | | |
| Oregano | | | | | | | | | | | | |
| Sage | | | | | | | | | | | | |
| Thyme | | | | | | | | | | | | |
| Spearmint | | | | | | | | | | | | |
| Rosemary | | | | | | | | | | | | |
| Dill | | | | | | | | | | | | |

Color indicates alternate every other week

# Appendix

## Crop Planting Map

Below is a copy of the crop planting map for 2017.



# Appendix

## Farm Map

Below is a map of Homefield Farm in 2017.


*Image source: Google Maps*


STUDENT AFFAIRS
DINING SERVICES
VIRGINIA TECH.

VIRGINIA TECH
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HORTICULTURE
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