

## Analyzing Crop Profitability And Financial Metrics On Flower Farms: Whipstone Farm Results

**Definitions and Background:** Each of four flower farms spent the 2022 season in a facilitated cohort using the Know Your Cost To Grow program. After choosing two crops to study, they identified all of each crop’s discrete direct variable labor activities, and then spent the season conducting time studies for each activity. At the end of the season, we were then able to calculate each crop’s total direct variable costs, and ultimately its contribution margin, defined as the crop’s returns to indirect costs and profit. Armed with this knowledge, a farm can then work towards the goal of increasing the overall combined contribution margin for all of its crops.

**Overall Results:** Both of Whipstone Farm’s crops studied, sunflowers and dahlias, had positive contribution margins per marketable bunch. The results show that sunflowers outrank dahlias, measured by the space constraint, and dahlias outrank sunflowers, measured by the labor constraint. In essence, this means that if Whipstone was short on labor, they should prioritize sunflowers over dahlias, but if they were short on bed space, they should prioritize dahlias over sunflowers.

Crop	Crop Unit	Price	Variable Cost Per Marketable Unit	Contribution Margin Per Marketable Unit	Contribution Margin Per Direct Labor Hour	Contribution Margin Per Standard Unit of Space
Sunflowers	Stems	\$1.70	\$27	\$1.43	\$154.91	\$1,147.75
Dahlias	Bunches	\$12	\$4.02	\$7.98	\$121.89	\$2,394.80

**Salient Costs:** Transplants (tubers) were a major cost for the dahlia crop, and harvest labor loomed large for both sunflowers and dahlias. For this farm to increase their contribution margin on both crops, a great place to start would therefore be to study and seek further efficiency in the harvest process, as well as to investigate how they might spend less on tubers.




---

*This material is based upon work that is supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, under award number G380-22-W8613 through the Western Sustainable Agriculture Research and Education program under project number FW22-395. USDA is an equal opportunity employer and service provider. Any opinions, findings, conclusions, or recommendations expressed in this publication are those of the author(s) and do not necessarily reflect the view of the U.S. Department of Agriculture.*

# Sunflowers

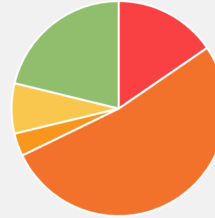
## Cost Breakdown

Crop/Crop Unit Costs per Cost Category

Sunflowers, D.S. Stem [Download](#)

Variable Costs	
Total Field Input Costs	\$32.80
Total Labor Costs	\$111.14
Total Machinery Costs	\$7.31
Total Packaging Costs	\$16.00
Total Seed or TP Costs	\$45.00

■ Total Field Input Costs 
 ■ Total Labor Costs 
 ■ Total Machinery Costs 
 ■ Total Packaging Costs 
 ■ Total Seed or TP Costs



## Labor Breakdown

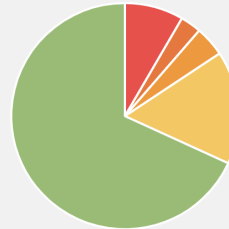
Crop/Crop Unit Labor Hours per Labor Activity Category

Hint: If you unable to see the Labor Activity Hours in the chart below, resize this page to expand the chart.

Sunflowers, D.S. Stem [Download](#)

Crop, Crop Unit	Labor Activity Category	Labor Activity Hour
Sunflowers, D.S., Stem	Bed Preparation	0.62
Sunflowers, D.S., Stem	Direct Seeding	0.22
Sunflowers, D.S., Stem	Irrigation	0.32
Sunflowers, D.S., Stem	Weed Management	1.20
Sunflowers, D.S., Stem	Harvest	5.05

■ Bed Preparation 
 ■ Direct Seeding 
 ■ Irrigation 
 ■ Weed Management 
 ■ Harvest



# Dahlias

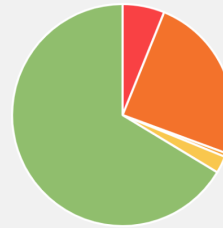
## Cost Breakdown

Crop/Crop Unit Costs per Cost Category

Dahlias Bunch [Download](#)

Variable Costs	
Total Field Input Costs	\$74.00
Total Labor Costs	\$294.71
Total Machinery Costs	\$6.49
Total Packaging Costs	\$30.00
Total Seed or TP Costs	\$800.00

■ Total Field Input Costs 
 ■ Total Labor Costs 
 ■ Total Machinery Costs 
 ■ Total Packaging Costs 
 ■ Total Seed or TP Costs



## Labor Breakdown

Crop/Crop Unit Labor Hours per Labor Activity Category

Hint: If you unable to see the Labor Activity Hours in the chart below, resize this page to expand the chart.

Dahlias Bunch [Download](#)

Crop, Crop Unit	Labor Activity Category	Labor Activity Hour
Dahlias, Bunch	Bed Preparation	0.62
Dahlias, Bunch	Transplanting	1.03
Dahlias, Bunch	Irrigation	0.22
Dahlias, Bunch	Weed Management	1.20
Dahlias, Bunch	Plant Care	0.58
Dahlias, Bunch	Harvest	16.00

■ Bed Preparation 
 ■ Transplanting 
 ■ Irrigation 
 ■ Weed Management 
 ■ Plant Care 
 ■ Harvest

