



National Proficiency Application

Nursery Operations

IN

IN0078

604177230

Entrepreneurship vs Placement Percentage

Entrepreneurship: **100%** Placement: **0%**



Applicant Information

Applicant Name

Isaac Pohl

Chapter Name

Gibson Southern

Statement of Candidate and Parent/Guardian

We have prepared this application and certify that the records are true, complete and accurate and we hereby permit for publicity purposes the use of any information included in the application with the exception of the following:

1/26/2023 11:38:00 AM

Date

Timothy Pohl tapohl@frontier.com

Parent/Guardian Signature

1/26/2023 11:32:00 AM

Date

Isaac Pohl

Candidate's Signature

Certification

We have verified the application and find that the statements contained herein are such that we are able to recommend him/her for the Degree/Award. Furthermore, we verify that he/she has conducted themselves in a manner to be a credit to the organization, chapter, school and community.

1/26/2023 11:06:00 AM

Date

Jessie Schermerhorn-Mraz

Chapter Advisor Signature



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Applicant Contact Information

Name as you want it to appear on the certificate

Isaac Pohl

Name on the FFA Chapter Roster (if different)

Name Pronunciation

Address

66 W 975 S

City

Haubstadt

State

IN

Zip Code

47639-4800

Email Address

impolh@sgibson.k12.in.us

Home Phone

(812) 215-0290

Father/Guardian Name

Tim Pohl

Mother/Guardian Name

Angie Pohl

Parent/Guardian Occupation

Problem Solving Manager

Parent/Guardian Occupation

Student Teacher

Chapter Information

FFA Chapter Name

Gibson Southern

School Name

Gibson Southern High School

School Address

3499 W 800 S

School City

Fort Branch

School State

IN

School Zip Code

47648

School Phone

812/753-3011

Chapter Advisor(s)

Jessie Schermerhorn-Mraz

FFA History

Year FFA Membership Began (as reported by FFA.org. 2013-14 is the earliest year membership data is available for any student)

2020

Membership months (as reported by FFA.org)

28

Is a current member for the ending date of this application?

Yes

Education Information

High School Graduation Year

2024

If not, give date left school

Years of Ag Education Offered (grades 7-12) in high school last attended

4

Ag Education completed in High School

Years: 2 Hours:



National Proficiency Application

Basic Award Setup Information

I. Application Dates

Beginning Date for this Application
1/1/2020

Application Ending Date
12/31/2022

II. Proficiency Type

Proficiency Type
Nursery Operations

Entrepreneurship vs Placement Percentage
Entrepreneurship: 100% **Placement: 0%**

Primary Pathway of SAE
Plant Systems

III. Assets

1. Current/Operating Assets	Value at Beginning Date	Value at Ending Date
a. Current/Operating Inventory (Entrepreneurship Experiences)		
1. Investment in harvesting and growing crops	\$0	Itemized ending inventory values are reported on "Ending Current Inventory" page.
2. Investment in feed, seed, fertilizer, chemical, supplies, prepaid expenses, and other current/operating assets	\$0	
3. Investment in merchandise, crops and animals purchased for resale	\$0	
4. Investment in raised market livestock & poultry	\$0	
2. Non-Current Inventory	Value at Beginning Date	Value at Ending Date
a. Investment in non-depreciable draft, pleasure, and breeding animals	\$0	Itemized ending inventory values are reported on "Ending Non-Current Inventory" page.
b. Investment in depreciable draft, pleasure, and breeding animals	\$0	
c. Investment in depreciable machinery, equipment, and fixtures	\$480	
d. Investment in depreciable land improvements, buildings, and fixtures	\$399	
e. Investment in land	\$0	



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Performance Review A

1. Briefly explain your SAE and how it related to this award area.

My plant system SAE, located in Haubstadt, Indiana, is based on my hobby greenhouse. I have owned and operated this 8'5" X 6' 3" greenhouse since 2019 when my parents gifted it to me as a Christmas present. My interest in horticulture began with landscaping and the value of bringing joy to people when they purchase flowers. My brother, Josh, and cousin, Deven, majoring in Agronomy, encouraged my interest in plants. When Deven was diagnosed with cancer, I started a greenhouse called Pohl's Greenhouse in his memory. Growing plants in a controlled environment enabled me in 2020 and 2021 to produce and sell vegetable seedlings and flowers to my family. In 2022, I expanded my business significantly. I planted and tended 300 flowers and vegetable seedlings, which resulted in \$735 worth of sales. This SAE required me to purchase seed-starting equipment such as grow lights, propagating flats, fertilizer, pest control spray, and high-quality soil. I cultivated 23 different species of plants and flowers throughout my operation. In addition, I sold pots, homemade wooden hanging baskets, plastic hanging baskets, and containers. My first public sale was on April 10, 2022. During 2022, I accumulate 11 stock plants of common household plants to propagate for 2023. To acquire funding and expand my greenhouse business more quickly, I applied for an SAE grant with National FFA. I aim to beautify the community and ensure the company's financial stability.

2. Briefly explain how your roles, responsibilities, and/or management decisions related to this award area changed.

At the beginning of the year, I carefully chose seeds with a high germination rate, sustainable root maturity, and development. I researched the best germination environment, including the proper soil, soil temperature, disease prevention methods, and the correct humidity levels. After planting and developing their second true leaf, they needed to be moved from the germination room into the greenhouse. I research the suitable container size, soil, and fertilizer for finishing the plants. The growing season brought heating issues, pests, poor circulation, and humidity issues, which could cost me the entire crop. These problems had to be researched and adequately taken care of. I needed to maintain the growth of the plants and ensure they received the required amount of water and fertilizer in the morning. After the plants were fully grown, it was time to market them, which I did through my Facebook page, a website, and Google optimization. After the growing season, I faced the challenge of cleaning my greenhouse. In 2022, I replaced all the greenhouse panels, put in new rocks, stained the wood, and cleaned the growing containers. During the year, I learned greenhouse management practices, including propagation methods, temperature and humidity control, air circulation, and pest control. My roles will continue to change as I learn from previous years, develop new management practices, and as new challenges arrive.

3. Briefly explain what is the single greatest challenge you faced in this award area and how did you overcome that challenge?

Maintaining a consistent temperature throughout January, February, March (2020 & 2021), and January (2022) was my biggest challenge. To combat this issue, I tried using an oil-filled heater for its affordable running cost, which provided a steady heat output. I also installed bubble wrap on the greenhouse roof's interior to prevent heat from escaping at night. This process proved successful, resulting in an average temperature increase of 5 degrees Fahrenheit. The third process I conducted to keep the heat in was placing buckets of water on the greenhouse floor to absorb thermal heat during the day and release it at night. However, the small space of the greenhouse prevented this from being a permanent solution. On cold nights the propane heater still had to be turned on and would randomly stop. In addition, I had to monitor the inside temperature throughout the night as outside temperatures fluctuated. On one occasion, I had to move all the plants indoors to prevent them from dying. After investigating, I found that the heater was stopping due to the propane fumes on the thermocouple in the heater. After cleaning the heater with steel wool, it worked throughout the season. Lastly, at the end of the year, I replaced the greenhouse panels with triple pane panels and purchased a thermometer timer for the heater. This timer permitted the heater to operate when needed, could save on running costs, and helped maintain a constant temperature.



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Performance Review B

Briefly explain your three greatest accomplishments or findings in this award area.

Accomplishment/Finding #1

Personal Development: At the beginning of this greenhouse enterprise, I was surprised to learn how much I would enjoy and learn from this experience. My initial goal was to acquire a new hobby and to determine if a future career option in the plant and soil science industry was for me. Through this SAE, I have yielded so many unexpected benefits. The skills I have gained include timely problem-solving, goal-oriented dependability, and organization in the workplace. I can translate the skills gained from this project to future careers I pursue. My plan is to continue my hobby greenhouse to help fund my college expenses.

Accomplishment/Finding #2

Germination Requirements: Learning how seeds require specific conditions to germinate. Through trying to germinate seeds, I realized that the necessary amount of light and moisture varies depending on the seed variety. Additionally, I discovered through research that some seeds need darkness to germinate (like vincas) while others require a stratification period (like perennials). Further, I found that growing seeds in flats is the best technique, with a dome on top to keep moisture and humidity levels high. I tested this with a sample of snapdragon seeds, raising the seed germination rate by 43%. Lastly, I found that a spray bottle with a well-drain seed starting soil is the best tactic to control soil moisture.

Accomplishment/Finding #3

Cost Effectiveness: I had to determine the size container that would maximize the growing success of the plants while being cost-effective. This year I experimented with transplanting seedlings in three different size containers. After testing with snapdragons, geraniums, and salvias, I found that transplanting the plants into containers one inch larger than their previous ones provided the best results. During the upcoming year, I will apply this finding to purchase extra-size containers to transplant my plants before moving them into the finishing pots. Although this might be a more significant initial investment, it will minimize the time plants spend in the greenhouse to avoid issues with cooling, heating, and pest.



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Performance Review C

What are three ways your experiences or opportunities in this award area will impact your future.

Impact #1

Networking: My greenhouse has allowed me to develop local connections in the community that will impact me for a lifetime. An example is that I developed a relationship with a local greenhouse owner who offered me a job opportunity during the summer and fall of 2023. This opportunity will help me learn new ways of growing plants. Also, I have developed relations with community members interested in supporting me on my journey and willing to donate their previous growing containers and hanging baskets. This SAE has allowed me to develop leadership skills, social skills, and patience through these conversations.

Impact #2

Adaptability: This past year, I realized that customer preferences are only sometimes what you expect them to be regarding the type of flowers they want. For example, the most common statement which customers brought up was wanting to avoid getting a specific flower because they would need to remember to water it. As a result, I plan to adjust my inventory by planting more drought tolerant flowers and more of a variety of flowers. Also, this past year I surveyed customers to help me understand their preferences. This experience has taught me to be open to new ideas and possibilities, the importance of problem-solving, and the value of customer opinions.

Impact #3

Record Keeping: Over the years, I have found it crucial to maintain detailed records on the finances of my SAE, task completion times, germination and bloom times, planting deadlines, and various other experiments I have conducted. By keeping my data well-organized, with accurate records and detailed notes, I can analyze growth patterns and make informed decisions in the future. Some of the technology and tools I learned include Google Spreadsheets, Documents, and Forms. Using all Google tools allowed me to access the data through the cloud and simultaneously move the data across apps. In addition, this experience has helped me develop skills in organization, planning, duration management, and research that will be valuable in the future.



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Supervised Agricultural Experience - Entrepreneurship

2020

Pathway	Name & Description	Size/Scope of Enterprise
Plant Systems	Pohl's Greenhouse I stored four plants (three mums and one daisy) in the greenhouse for a community member. In addition, I grew 52 buttercrunch lettuce leaves to sell to my family. This year, I opened my perspective on what I could grow in this greenhouse, giving me the desire to expand my use of the greenhouse into an entrepreneurship SAE.	Stored 4 plants and grew 52 lettuce plants

2021

Pathway	Name & Description	Size/Scope of Enterprise
Plant Systems	Pohl's Greenhouse This year I stored 20 succulents for my brother in my greenhouse. I started to experiment with growing plants from seeds. I grew plant varieties this year, including Cherry and Roma tomatoes, summer squash, morning glories, zinnias, and dianthus. I also sold vegetable seedlings to the local community. I grew lettuce again this year to sell to my family.	Stored 20 plants and grew 60 plants by seed

2022

Pathway	Name & Description	Size/Scope of Enterprise
Plant Systems	Daily watering and scheduling fertilizer On average, I spent 20 minutes a day watering. On the weekends, it was around 40 minutes, including the addition of fertilizing.	40 hours
Plant Systems	Germinating Seeds Starting seeds, watering seeds, etc	12 hours
Plant Systems	Other task Pinching plants (4.5 hours), greenhouse maintenance (2 hours), and making price tags for the sale (3 hours).	9 hours and 30 minutes
Plant Systems	Pohl's Greenhouse These flowers include 45 SnapDragons (Topper Hybrid), 16 Salvia (Victoria), 31 Geraniums (Border Mix), 29 Impatiens (Candy Box), 21 Petunia (Supercascade White Hybrid), 17 Petunia (Burpee's Best Hybrid), 33 Marigolds (Boy O' Boy), 24 Coleus (Chocolate Mint), 28 Cosmos (Rosetta), 6 Vinca (Arizona). I started these inside using a grow light system and finished these in the greenhouse. My average germination rate for these plants was 87% average.	252 Flowers
Plant Systems	Pohl's Greenhouse These include eight wooden hanging baskets and ten plastic. Three plastic hanging baskets had Supercascade White Hybrid Petunia, three had Burpees Best Hybrid (Mix Color), one was Geraniums, and the final was Impatiens. Out of the wooden baskets, two had Burpees Best Hybrid (Mix Color), one had Supercascade White Hybrid Petunia, two had Marigolds, one had Geraniums, and two had impatiens. On average, I placed four to five plants per basket.	18 hanging baskets
Plant Systems	Pohl's Greenhouse These include 26 Tomatoes (Roma VF), 20 Summer Squash (Black Magic), 21 Sweet Peppers (Hybrid Giant), 3 Sweet Basil, 4 Siam Queen, and 1 Rosemary. The vegetables were grown in 4-inch containers and sold, but the herbs were not ready in time for sale and only had a 21% germination rate, while the vegetables had an 89% germination rate.	75 Veggie Starters and Herbs
Plant Systems	Pohl's Greenhouse This year I decided to start growing houseplants to sell in the future. So I asked customers if I could propagate through cuttings and offsets of their houseplants and ferns to sell for the 2023 growing year. I reproduced one sword fern, a spider plant, four aloe plants, and eighteen succulents.	Propagating Houseplants
Plant Systems	Pre Research for Season Germination of a new seed type, refreshing how to grow plants, finding the right seeds to grow, investigating new products/business expansion ideas, advertising/ marketing ideas.	16 hours
Plant Systems	Preparation for season Ordering seeds, cleaning containers, installing grow light systems, getting the heater ready to work, and laying out experiments..	8 hours
Plant Systems	Research during season Disease prevention methods, plant problems, pest prevention, ways to prune, and forms to grow better plants.	8 hours
Plant Systems	Selling plants Getting plants ready to sell (wiping pots off, trimming, etc.)(2 hours), two weekends sale (8 hours each), one 4-H Center sale (7 hours), moving plants to 24/7 plant stand (3 hours).	28 hours
Plant Systems	Transplanting plants Transplanting plants to bigger containers (6 hours) and moving plants to the greenhouse (2 hours)	8 hours

Plant Systems	Working on heating greenhouse plants Installing bubble wrap (2 hours), thermal trapping system (45 minutes), moving plants in the middle of the night (3 hours), waking up in the middle of the night(3 hours).	8 hours and 45 minutes
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Income and Expense Summary of SAE Program

	2020	2021	2022	Total
1. Revenues from Operations				
a. Closing Current Inventory	\$58	\$94	\$586	\$586
b. Beginning Current Inventory	\$0	\$58	\$94	\$0
c. Change in Current Inventory	\$58	\$36	\$492	\$586
d. Cash Sales	\$55	\$60	\$735	\$850
e. Value Used at Home (Non-cash)	\$42	\$83	\$100	\$225
f. Value of Production Transferred to other enterprise, Transferred to Non-Current, Bartered or Labor Exchanged (Non-cash)	\$40	\$28	\$212	\$280
h. Gross Revenues (Change in Current Inventory and Total Sales)	\$195	\$207	\$1,539	\$1,941
2. Expenses from Operations				
a. Inventory Purchased for Resale (Cash)	\$0	\$0	\$0	\$0
b. Inventory Purchased for Resale (Non-Cash Transfers)	\$0	\$0	\$0	\$0
c. Cash Expenses (all other types)	\$31	\$129	\$632	\$792
d. Non-Cash Expenses (Transferred, Bartered, or SAE Labor Exchange)	\$40	\$14	\$106	\$160
e. Contributed Non-Cash Expenses (Gift or non-SAE Labor Exchange)	\$21	\$20	\$428	\$469
f. Total Operating Expenses	\$92	\$163	\$1,166	\$1,421
3. Net Income from Operations	\$103	\$44	\$373	\$520
4. Non-Current Inventory				
a. Closing Inventory	\$851	\$833	\$955	\$955
b. Transfer in from Operations (Non-Cash Transfers of non-current assets)	\$0	\$20	\$118	\$138
c. Contributed Inventory (Outside contribution of non-current assets - gift)	\$50	\$0	\$0	\$50
d. Purchases	\$0	\$0	\$134	\$134
e. Beginning Inventory	\$879	\$851	\$833	\$879
f. Sales	\$0	\$0	\$0	\$0
g. Non-Cash Sales	\$0	\$0	\$0	\$0
h. Net Non-Current Transactions	-\$78	-\$38	-\$130	-\$246
5. Net Income From Operations & Net Non-Current Transactions	\$25	\$6	\$243	\$274
6. Annual Profitability Measures				
a. Operating Profit Margin (OPM) Net Operating Income/Totals Sales = % of sales related to profit	53%	21%	24%	27%
b. % of Total Returns from Net Non-Current Gains (Net Non-Current Gains/Total Gains)				
c. Review Non-Current Ending Inv. Value				



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Candidate Inventory Statement - Current Inventory

A. Harvested and Growing Crops/Plants on 12/31/2022

Description	Quantity	Value
Sword Fern (Nephrolepis Exaltata) (10 inch plastic hanging basket)	1	\$10
Snake plant (Sansevieria Trifasciata) (2: 4 inch round clay pots)	2	\$5
Spider Plant (Chlorophytum Comosum) (9 inch plastic hanging basket)	1	\$10
Aloe Vera (Aloe barbadensis miller)(4: 5 inch round clay pots)	4	\$7
Gollum Jade (Crassula Ovata)(13: 2 in square plastic containers) (2: 6.2 in clay pot)	15	\$22
Topsy Turvy Echeveria (Echeveria runyonii) (15: 2 in square plastic containers) (3: 5 in clay pot)	18	\$27
Ghost Plant (Graptopetalum Paraguayense) (7: 2 in square plastic containers) (2: 5 in clay pot)	9	\$13
Common Houseleek (Sempervivum tectorum) (3: 5 inch clay pot)	3	\$2
Zebra plant (Haworthiopsis Fasciata) (15: 2 in square plastic containers) (4: 3 inch clay pots)	4	\$6
Pulido's echeveria (Echeveria Pulidonis) (5: 6 in clay pot)(5:5 in clay pot)(3: 6.2 in clay pot)	14	\$21
Thanksgiving Cactus (Schlumbergera truncata)(1: 2.2 inch pot)(3: propagation tray)	4	\$15
TOTAL		\$138

B. Feed, Seed, Fertilizer, Chemicals, Supplies, Prepaid Expenses, and other Current Assets on 12/31/2022

Description	Quantity	Value
Salvia (Victoria) 35% of packet (43 seeds)	1	\$1
Marigold (Boy O' Boy) (25% of packet (18 seeds))	1	\$1
Tomato (Roma VF) (75% of packet (112 seeds)	1	\$3
Summer Squash (Black Magic) (25% of packet 1 packet 10 seeds)	1	\$2
Sweet Peppers (Hybrid Giant) (25% of packet- 9 seeds)	1	\$2
Sweet Basil (50% of packet - 75 seeds)	1	\$2
Siam Queen Basil (50% of packet - 150 seeds)	1	\$2
Oregano (50% of packet 125 seeds)	1	\$2
Rosemary (50% of packet- 50 seeds)	1	\$2
Lemon Balm Herb (50% of packet- 125 seeds)	1	\$2
Propagation Trays (No Drain Holes) (For seed starting) (20in * 10in)	10	\$29
1.5LB (680g) 20-20-20 Jack's Fertilizer	1	\$6
1.5LB (689g) 20-6-22 Petunias Jack's Fertilizer	1	\$9
Peppermint oil (30%)	1	\$3
Linseed Oil for greenhouse wood protection	1	\$16
Bubble wrap (12 inch *72 ft 3/16" wrap) Pack of 2 rolls	1	\$17
Plastic Label for plants	99	\$3
Miracle-Gro seed starting potting soil (7.5 qt)	4	\$31
Hanging Basket (10.5" width) (6.5" Height)	30	\$45
Hanging Basket (9.5" width) (6" height)	30	\$38
Hanging Basket (8.75" width) (7.75" height)	5	\$5
Round Plastic Pot (9.5" width)(9" height)	2	\$3
Round plastic pot (8.5" width)(6" height)	59	\$24
Round plastic pot (8.5" width)(5.5" height)	28	\$11
Round plastic pot (8" width)(6" height)	22	\$9

Round plastic pot (8" width)(5.75" height)	7	\$3
Round plastic pot (8" width)(5.25" height)	3	\$1
Round plastic pot (7.75" width)(5" height)	5	\$2
Round plastic pot (7" width)(4" height)	10	\$4
Round plastic pot (6.5" width)(5" height)	22	\$9
Round plastic pot (6" width)(6" height)	95	\$38
Round plastic pot (6" width)(5.75" height)	7	\$3
Round plastic pot (6" width)(4.5" height)	14	\$6
Round plastic pot (6" width)(4.25" height)	22	\$9
Round plastic pot (6" width)(4" height)	47	\$5
Round plastic pot (4.5" width)(4" height)	5	\$1
Round plastic pot (4" width)(5" height)	11	\$1
Round plastic pot (4" width)(4" height)	2	\$1
Square plastic pot (4"X4")	2	\$1
Round plastic pot (5" width)(5.25" height)	6	\$1
Round plastic pot (5" width)(4.5" height)	5	\$1
Round plastic pot (4.25" width)(4" height)	5	\$1
Round plastic pot (3.75" width)(5.5" height)	2	\$1
Round plastic pot (3.75" width)(3" height)	52	\$3
Square plastic pot (3.5"X 3.5")	4	\$1
Round plastic pot (3" width)(3" height)	22	\$1
18 inch Flower Pots	3	\$25
Large window flower pot (21 inch long)	1	\$25
Propagation Trays (10" X10")	11	\$11
10 Seed Cell Tray (9.75" X 4") (2" height)	5	\$5
18 Seed Cells Tray (10.5" X 5.5") (2.25" height)	7	\$3
4 Seed Cells Tray (5.25" X 3.5") (2.25" height)	13	\$6
4 Seed Cells Tray (5.25" X 5.25") (2.25" height)	11	\$4
6 Seed Cells Tray (8.25" X 6.25") (2" height)	8	\$4
106 Seed Cells Tray (10.5" X 21") (1" height)	1	\$4
	TOTAL	\$448

C. Merchandise, Crops, and Animals Purchased for Resale on 12/31/2022

Description	Quantity	Value
	TOTAL	

D. Raised Market Animals on 12/31/2022

Description	Quantity	Value
	TOTAL	



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Candidate Inventory Statement - Non-Current Inventory

E. Non-Depreciable Draft, Pleasure, or Breeding Animals on 12/31/2022

Description	Quantity	Ending Total Value
	TOTAL	

F. Depreciable Draft, Pleasure, or Breeding Animals on 12/31/2022

Description	Quantity	Acquisition Cost	Depreciation Claimed	Value
	TOTAL			

G. Depreciable Machinery, Equipment, and Fixtures on 12/31/2022

Description	Acquisition Cost	Depreciation Claimed	Value
Grow light setup (2 tiers) (One 2'X1.5' growing light) (2' single growing lights 6 total): 2022	\$100	\$15	\$85
Two 8' X 20" Custom Wooden Greenhouse Tables (included with the greenhouse): Acquired in 2019	\$120	\$14	\$106
One 20 Gallon Used Propane Tank: Acquired in 2019	\$50	\$1	\$49
1: 30 Gallon Used Propane Tank: Acquired in 2019	\$80	\$3	\$77
Mr. Heater Propane Heater: Acquired in 2019	\$180	\$31	\$149
8ft Plant Stand (Used from Pohl's Pumpkin)	\$100	\$8	\$92
4 Styrofoam for bottom rack of plant shelf: Acquired in 2019	\$18	\$5	\$13
Heat Light For Greenhouse: Acquired in 2019	\$32	\$18	\$14
TOTAL	\$680	\$95	\$585

H. Depreciable Land Improvements, Buildings, and Fences on 12/31/2022

Description	Acquisition Cost	Depreciation Claimed	Value
One Greenhouse Dimensions(8'5" X 6' 3" X 6'5")Covering(Polycarbonate Panel)Frame (galvanized steel)	\$399	\$29	\$370
TOTAL	\$399	\$29	\$370

I. Land on 12/31/2022

Description	Quantity	Acquisition Cost
	TOTAL	



National Proficiency Application

Learning Outcomes & Efficiency Factors

Learning Outcome or Efficiency Factor		Beginning Level	Level Attained	Description
1	Customer Base Grew On Facebook	<u>2021</u> 52 People	<u>2022</u> 96 People	When I opened my Facebook page in 2021, I started with 52 followers, including family. However, I've been working to expand my customer base through various methods, such as distributing flyers and sharing posts. In addition, I've utilized Facebook insights to analyze to engage my audience better.
2	Germination Rate Increased By 34%	<u>2020</u> 53% average germination	<u>2022</u> 87% average germination	I was able to increase the average germination rate on my seeds by changing brands, using seed starting soil, investing in grow lights for more of a controlled environment, and using humidity domes. I plan to continue increasing this in the future years by investing in heat mats and vermiculite.
3	Plant Fatalities - decreased by 12 plants	<u>2020</u> 15 died	<u>2022</u> 3 died	After doing more research on selected varieties of plants, I was able to give them more specific needs such as different soil, watering, light levels, and fertilizers based on pH levels.
4	Profit Per Plant Increased by 20%	<u>2020</u> 4" Flower Pot - \$.87, 3/4 gallon pots - \$ 5.98	<u>2022</u> 4" Flower Pot - \$1.18, 3/4 gallon pots - \$7.22	I kept records of yearly expenses, which helped me buy more items at a discounted price for the upcoming growing season. Items included soil and pots in bulk. Additionally, I saved seeds from previous years, like marigolds, to cut down on costs. Lastly, I was able to reuse pots from past years.
5	Social Media Skills	<u>2020</u> 10% responsibility	<u>2022</u> 100% responsibility	In 2020 my parents helped me post a Facebook advertisement marketing my plants. In 2021 I opened up a business Facebook page where I did three posts. Lastly, in 2022 I decided I needed to increase my marketing, so I did five posts leading up to and during the sale and two more throughout the year.



National Proficiency Application

Skills, Competencies, and Knowledge

A. Five Primary Skills, Competencies, and Knowledge within your Pathway

AFNR Performance Indicator		Contributions to Success
1	PS.03.02 Develop and implement a management plan for plant production.	Developing and implementing a plan for growing plants allowed me to stay focused on my tasks and target a plant sell date. This agenda also allowed me to keep records for future years. Some items I included on my plan were plant date, bloom date, germination date, and how many I sold.
2	PS.01.03 Develop and implement a fertilization plan for specific plants or crops.	I developed a fertilizer plan for all the plant varieties I produced to ensure each type had its full range of nutrients. First, I researched specific plant nutrient needs and ideal fertilizers based on their anatomical makeup and environmental factors. Then, using critical thinking, I made a schedule for my plant fertilizer plans. I also researched signs of a lack of a specific nutrient so I could modify my fertilization plan when needed.
3	PS.01.01 Determine the influence of environmental factors on plant growth.	Environmental factors play an essential role in plant growth. For example, there was a direct correlation when comparing the temperatures from the previous night to how the greenhouse plants looked the following day. When the temperature changes drastically, the plants curl and turn brown. Also, when the humidity was too low, the plant leaves shriveled.
4	PS.03.03 Develop and implement a plan for integrated pest management for plant production.	One problem which I didn't expect to run into was pests. Researching on the internet, I immediately identified that they were aphids and went to the local hardware store to get Insecticide soap, which I used every day for two weeks. After removing the nuisance, I looked at integrating pest management practices with the regular greenhouse schedule. Some pest practices included trying a pest repel pouch, peppermint oil, and sticky traps for the nuisance.
5	PS.03.01 Demonstrate plant propagation techniques in plant system activities.	I have learned to propagate through division, cuttings, offsets, and tubers, which I applied to ferns, succulents, spider plants, aloes, and elephant ears. I ensured the cuttings and tubers were calli before propagating and purchasing a rooting hormone.

B. Five Supporting Skills, Competencies, and Knowledge from any Pathway

AFNR Performance Indicator		Contributions to Success
6	ABS.05.01 Analyze the role of markets, trade, competition and price in relation to an AFNR business sales and marketing plans.	I looked at the local market and competition in Horticulture to determine if I could make enough money for the success of this SAE. After examining the local competition and determining that the closest was 10 miles away, I decided that a portion of the market was achievable. Then I based my expected income on comparable prices of other greenhouses in the area and aimed my expected sales on the low side for being a new business.
7	CRP.06.03 Create and execute a plan of action to act upon new ideas and introduce innovations to workplace and community organizations.	I learned always be ready to execute a new plan of action when a new idea or problem occurs. Trying further fortés is essential to maximize my greenhouse proficiency and enter new plant markets. One way I did this was in 2022 when I decided to get into the houseplant market. I took cuttings from family and friends to propagate and applied for an SAE grant to build a new system to put these houseplants in.

8	ABS.01.02 Read, interpret, evaluate and write statements of purpose to guide business goals, objectives and resource allocation.	I developed a statement of purpose for my greenhouse to stay focused on what I felt was important, especially in 2022, when I hoped to grow the business exponentially. Throughout 2022 when I was thinking about making a significant decision, I read through my statement of purpose to guild my choices. I evaluated it throughout the year and revised it at the end of the season because I had new goals to strive for. It has always been important to me to remain focused on my goals.
9	ABS.01.04 Evaluate, develop and implement procedures used to recruit, train and retain productive human resources for AFNR businesses.	One main problem I encountered was going out of town for class trips and vacations. Due to wanting to take advantage of these opportunities, I looked for someone to take care of the greenhouse while I was away. After evaluating friends and family members, I asked my aunt, who was glad to watch it for me. First, I had to train her on the water and heat requirements for the plants. Then, I wrote a plan on paper and walked her through the steps.
10	CRP.11.01 Research, select and use new technologies, tools and applications to maximize productivity in the workplace and community.	These past years I implemented new technology, tools, and applications. I purchased a wireless temperature and humidity monitor that I could see from my house. I reviewed many applications and apps to help me identify plant needs and problems. I purchased a grow light for starting seeds and installed an automatic timing system for greater quality control. For this next year, I built a three-layer grow light system with heat mats and fans, and I purchased a thermostat plug.



National Proficiency Application

Project Photos



Propagation skills: I decided to add houseplants to my inventory offerings. The most cost-effective method of doing this was through propagating house plants from others. So, I asked my family and friends if I could propagate their house plants. As a result, I have reproduced twenty plants: one sword fern (propagated through division), one spider plant (propagated through offset), four aloe plants (propagated through division), and eighteen succulents (propagated through cutting).



National Proficiency Application

Project Photos



Trial and Error: I also grew herbs in addition to growing flowers. The herbs I grew under my grow lights included Siam Queen Basil, which bloomed, Oregano, Sweet Basil, and Rosemary. I started growing these to observe if the herbs would germinate. I attempted germination the year before without success. Then I research best-growing practices to see what may have gone wrong. I have learned that failure provides learning experiences and continual skill development.



National Proficiency Application

Project Photos



Temperature Control: To combat my struggles to maintain a constant growing environment temperature in the greenhouse, I installed bubble wrap on the side panels, ceiling and door to try to stabilize the heat of the greenhouse during the cold months of January and February. The bubble wrap served the function of insulation. Adding the bubble wrap was the most cost effective method I found when researching solutions to my problem.



National Proficiency Application

Project Photos



Greenhouse Maintenance and Repairs: I am repairing the greenhouse roof. During the fall of 2022, 3 greenhouse panels flew off; after inspecting them, I found that the other panels were starting to get little holes through them. After evaluating the price of the panels to my budget, I decided to replace them. Keeping the greenhouse in good working condition is vital to the success of my greenhouse business.



National Proficiency Application

Project Photos



New LED System: I installed a new LED growing system to start plants indoors at the end of 2022. Once the plants are large enough, I move them to the greenhouse. My parents provide me with the space in the house's basement to start my plants. The plans I used to create this system are on the supplemental info page of this application. I ultimately selected this particular system because it allowed me to maximize my growing area because of the vertical layout. The price would be on the 2023 bill.



National Proficiency Application

Project Photos



Final Products for Purchase: I am selling my flowers at the local 4-H fairgrounds. I had to determine the best location to sell my products based on traffic, wealth measures, and competition levels. This sale was successful as I exceeded my goal of \$200 by \$90 for this event; I also started to develop customer retention and loyalty. At this sale, I sold four wooden hanging baskets, three plastic hanging baskets, 27 4" pots of flowers, 16 4" vegetable plants, and 11 8" flower bundles.



National Proficiency Application

Checklist of Minimum Qualifications

- Missing, Error or Not Met values on the checklist below indicate items that will penalize or disqualify the application.
- "Review" indicates a condition that may require additional explanation or documentation.
- Regardless of the qualifications shown here, FFA staff and reviewers may contact the advisor or applicant for additional information and evidence, including, but not limited to, SAE agreements and record books.

Item	Value
Candidate has a minimum of 12 months of FFA membership.	MET
Candidate has a current membership for the ending date of this application.	MET
Candidate has fully described and selected one to five Learning Outcomes or Efficiency Factors.	MET
All pictures include captions.	MET
All pictures include a digital upload.	MET
The Basic Setup Page includes beginning and ending years that are at least two different years.	MET
The SAE details pages include information from at least 2 calendar years.	MET
If graduated, applicant must have completed at least three full years of agriculture, or all of the agriculture offered at the school last attended.	MET
If graduated, applicant must have been out of high school for no more than one year	MET
Ending Date is Dec 31 of the year prior to the National Convention which you are applying to receive an award.	MET
Required attachments have been uploaded.	MET
Candidate has obtained the required current electronic signatures and approvals.	MET

Pohl's Greenhouse

Business Plan



Isaac Pohl, Owner
Highway 41
66W 975S, Haubstadt, IN, 47639
pohlpumpkin@gmail.com

Executive Summary

Since 2020, I have been growing plants in my greenhouse. The motivation for starting a greenhouse was partly due to my brother and my cousin Deven majoring in agronomy. The original goal was to develop a new hobby and perhaps develop a potential career opportunity like my brother.

During 2020, I started experimenting with growing plants by growing the local community plants during the winter in my greenhouse. I grew 50 lettuce plants to sell to my family and kept some of the local community plants and flowers in my greenhouse. During 2020, I cared for three mum and one daisy. I made \$55 this year. In 2021 since I had more time because of COVID, I decided to expand my hobby and grow 50% more lettuce plants to sell, and also grow cherry and Roma tomatoes, summer squash, morning glories, zinnias, and dianthus. This year I grew 60 plants from seeds, stored 20 succulents, and grew 98 plants of lettuce. In total, I made \$60 this year.

After my cousin, Deven passed in 2021 from cancer. I decided in 2022 that I wanted to expand my business because I knew how much he enjoyed the FFA greenhouse. This year I grew 15 varieties of flowers and plants and marketed \$735 of flowers and vegetables.

In 2023, I was accepted to get \$1,000 of SAE grant money from Bob Evans to help grow my business. I plan on using this money to buy new supplies for my greenhouse to make it more automatic including an automatic timer. I also plan on investing in a new grow light system with this money. A copy of the grant application is attached to this document.

Sources and Uses of Funds

Other funds (not generated from this SAE project but are being productively invested to grow my business)

My investment - \$1,846.49

Sources

- Pohl's Ag Services:

Pohl's Ag Services is a crop analysis company located in Princeton, Indiana. My title for this job is Junior Assistant, since 2020 I have worked for the company. During the summer of 2022, I was in charge of maintaining proper agricultural equipment to company standards, gathering soil and crop samples that were tested to ensure they met standards, and identifying field problems and how to address the problem to meet farmers' desired yields. In the summer of 2022, my hourly pay was \$10 an hour. This upcoming year along with last year's responsibilities, I will be faced with new responsibilities such as taking leaf samples and designing web applications to analyze the data.

- Pohl's Farms:

Pohl's Farms owned by Steve Pohl is located in Haubstadt, Indiana. For this job, I am a farmhand. During the summer I help with the wheat harvest and during the fall I help

with corn harvesting. I also help with miscellaneous work which the farmer needs, such as cleaning grain bins out. While harvesting my hourly pay is \$17 an hour, and while accomplishing other jobs my hourly pay is \$15 an hour. I have worked here since 2019.

- **Selling Pumpkins:**

Ever Since 2015, I have operated a pumpkin patch, which I sell on a local stand by my house. In 2020, I decided that I wanted to expand this patch and split the company up with my cousin, which allowed us to expand the patch to a $\frac{1}{2}$ of acre more land. To sell this amount of pumpkins, we opened two new selling locations, one at a local saloon and the other at my cousin's house

- **Kuester Landscaping:**

Kuester Landscaping is owned and operated by Mike Kuester and has three total employees. Some responsibilities I had was performing a variety of planting and maintenance tasks including sod laying, shrub trimming, planting, watering, weeding, and mulching in such a manner as to maintain high customer satisfaction. Another task I helped with was to design the type, quantity, and quality of horticultural plants to be installed, such as trees, shrubs, and bushes. For this job my hourly pay was \$13.

Donated items

Parent Gifts

- Land for greenhouse: \$26.15 a month for 87.15 ft²
Note - Using 30 cent per ft²
(Agreement Attached)
- Greenhouse: \$399
- Two 8' by 20" Custom Wooden Greenhouse Tables (included with the greenhouse): \$101.32
Note- Includes 2X4 wood and metal racks
- Mr. Heater Propane Heater - \$180
- 20 Gallon Used Propane Tank - \$50
- 30 Gallon Used Propane Tank - \$80

Customer Gifts

- 35 Hanging Baskets - \$87.5
- 452 Round Plastic Pots- \$113
- 18 Square Plastic Pots - \$4.5
- Skids - \$20
- Tips - \$24.95

Partnerships

- Electricity: I provide my parents with lettuce and flowers and they help pay for my electric cost for the greenhouse.

Note - Total (Base on Average Rating Pulling from an Oil Filled Heater of .15 Cent per hour on a 15 hour day and 7 days a week (\$15.75 per week) on average running time of 69 days of running - \$155.25 in total per year

- I provided my parents with staining all of their outdoor wood such as wooden landscape decor for using the Oil for my greenhouse wood to help protect it longer - \$17.60

Pending Sources Of Funds

*Expected to receive these funds in Early 2023

SAE Grant Money - \$1,000

Uses of Funds from SAE Grant:

- Grow light system - \$832.66
- Growing Supplies - \$527.59
- Operating Expenses - \$120

Business Organization

Pohl's Greenhouse, private ownership company owned by Isaac Pohl.

Business Goals and Purpose

Statement of Purpose - To the best of my ability I will provide customers with commercially expected products at market value and will establish a long lasting relationship with as many customers as possible. Pohl's Greenhouse will remain a customer first company.

Smart Goals

To increase greenhouse running cost by 20% through new and unique ways by 2025

- Through maintaining heat in the greenhouse
- Through keeping plants indoor longer under grow lights
- Through finding cheaper ways to heat the greenhouse

To decrease product expense cost by 10% by 2024

- To find more cost efficient soil types without sacrificing quality
- To order products during business sells during the year such as cyber Monday and holiday sales

To grow, sell, and market \$1000 worth of products in 2023 by offering sales three times during the calendar year; with each sale focusing on seasonal plants

Long Term Goals

To expand and revise the varieties of plants based on customers previous orders

- Keep records on customer previous orders
- Send out surveys to get input on customers recommendations for plants
- Try new plants to see if they get bought

To find new ways to connect with customers through unique marketing techniques

- Through more social media
- Through local advertising methods (newspaper and local event pin board)

The goal is to impact as many people as possible in the local community

- Offering higher quality products
- Developing a better relationships with customers
- Advertise more

To ensure repeat customers in the life of this business

- Advertise plant sell
- Surveys

Marketing Plan

The combination of our excellent location, competitive pricing, exceeding well products, and good local and transient markets will ensure the nursery success in the future.

Target Market

- Local community members ages 23 and up
 - Target area includes Gibson County and Vanderburgh County
- Toyota Traffic since right outside of Highway 41
- Local nursery home
- Local business for landscape use

Products and Pricing

We offer a plant sale in the spring in which we will sell 15 different varieties of flowers and are looking to continue to expand in 2023 and get into houseplants, perennial, and microgreens.

Note- Prices are from 2022

Single Container Flowers - \$2

Vegetable Seedlings - \$1

¾ Gallon Pots- \$10

Hanging Baskets - \$15

Wooden Hanging Baskets - \$20

Promotion

Most of the promotion is done online through Facebook, Google and Instagram. We also have some advertising done in some local shops including a local grocery store (Holiday Foods), a local solon (cutting style clippers), and we also have road signs. Lastly I plan on marketing in the local newspaper as well.

Here is are url to are Facebook page :www.facebook.com/pohlgreenhouse

There is a pdf attached to this documents with are flier for 2023

Place

Pohl's Greenhouse is located just off of Highway 41 and is a ½ mile from Haubstadt and is 1 mile out from Fort Branch which makes this a prime location.

Sales People

I will be involved in most of the advertising, although Rachel Pohl gives input on ideas and templates ideas for the advertising papers and posts.

Competition

Grocery Store - There is a local plant sale which happens at a local grocery store (Holidays Foods) which happens every spring. I think by having my first plant sell late April which is 2 weeks after last year I will attract more customers.

Operations

Hours of Operations

Pohl's Greenhouse will be open every weekend starting on 22 of April from 7:00 am to 6:00 pm and will provide a 24/7 outdoor plant stand starting May 8, weather permitting.

Personnel

The following are the Pohl's Greenhouse job duties and responsibilities:

Isaac (self) - Operations

- Be knowledgeable about the stages and diseases of plant life
- Manage greenhouse equipment and computer controls
- Explore ways to improve processes for more efficient growth and harvest yields
- Mix and maintain fertilizer rates
- Prune and trellis crops
- Disease and pest management
- Move plants to retail plant stand
- Plant seeds and transplant
- Moisture and manage soil conditions
- Construct structures and accessories such as greenhouses and benches.
- Maintenance and repairs
- Planting and caring for plants, flowers, and trees in greenhouse settings
- Watering plants and providing other forms of basic maintenance such as pruning and fertilizer
- Caring for and propagating plants for commercial use in nurseries and greenhouses
- Planting seeds and seedlings in trays and pots for sale in nurseries or retail store

Isaac (self) - Business and Marketing

- Oversee inventory of plants
- Provide information to customers on the care of trees, shrubs, flowers, plants, and lawns.
- Keep company records
- Plan marketing and promotion
- Determine types and quantities of horticultural plants to be grown, based on budgets, projected sales volumes, or executive directives.
- Manage & schedule harvest based on crop/market schedule
- Maintain supply inventory for fertilizer, consumable items, packaging
- Plant species to be planted in conjunction with holidays, climate, and time of year

Customer Service

Pohl's Greenhouse offers outstanding Customer Service by providing customers 24-hour support through Facebook messenger and email for their growing plant needs and questions. We strive to provide customers with accurate information about plants that thrive in the customer-planting environment. We provide this information through our website and Facebook page. We constantly change our prices and products to keep up with the changing customer essentials. We accomplish this by sending surveys to customers at the end of the year. These surveys are attached at the very bottom of this document, along with an analysis of the data.

URL for Website: <https://sites.google.com/view/pohls-greenhouse/home>

Building & Improvements

Pohl's Greenhouse has a 8.2' X 2' produce stand on wheels with a roof to sell to customers and to make 24 hour open operation possible. Pohl's Greenhouse also has a 8'5" X 6' 3" X 6'5" greenhouse where we grow the plants and this year we got a 4 tier 2'X4' wide 82" tall growing rack with led grow lights. I also replaced all the greenhouse panels this year.

Equipment

Pohl's Greenhouse currently has the following equipment, which will be used in the business:

Greenhouse - \$399

Growing Tables - \$101.32

Mr. Heater Propane Heater - \$180

20 Gallon Used Propane Tank - \$50

30 Gallon Used Propane Tank - \$80

Grow Lights - \$513.98

All equipment is in good working order and is maintained to industry standards.

Financial Statements

This information is by year starting in 2019/2020 and ending in 2023

2019

Items Gifted (From parents)

Greenhouse	\$399.00
1: 20 Gallon Propane Tank	\$50.00
1: 30 Gallon Propane Tank	\$80.00
2 8ft by 20 in Custom Wooden Greenhouse Tables (included with the greenhouse)	\$101.32
Mr. Heater Propane Heater	\$180.00
80 Sq ft Land	\$170.00
Rebar stake anchor	\$21.00
4 Styrofoam for bottom rack of plant self	\$18.00
Heat Light For Greenhouse	\$32.00
Total Gifted	\$1,051.32

2020

2020 Budget Statement and Income Goal

<u>Budget</u>	<u>Cost</u>
Lettuce Seeds	\$5
Propane Heating	Parents Buying
Pots	\$6
Soil from garden	Free
Homemade Planting Big Boxes out of cardboard	Free
Total Budget	\$11.00
<u>Income Goal</u>	<u>Amount</u>
From Lettuce	\$30
From Storing Plants	\$30
Total Income Goal	\$60

2020 Sales

Stored For Customers

1 - Yellow and Pink Mix Mum

2 - Orange Mums (Both died)

1 - Daisy

\$35 Total

ButterCrunch Lettuce Sales - \$20

Total - \$55

Value of Products not sold but used at home

- \$42

2021 Received (items gifted to me) and SAE Labor Exchange

<u>Gifted Items</u>	<u>Value Worth</u>
24 random pots of different sizes	\$8.00
Pest Repel pouches	\$12.00
<u>SAE Labor Exchange</u>	
18 Succulents (From helping my brother with his class project)	\$13.50
Total Gifted and Exchanged	\$33.50

<u>2020</u>		<u>Cost</u>	<u>Quality</u>	<u>Amount Left</u>	<u>Total Cost</u>
Buttercrunch Lettuce	1 packet (500 seeds)	\$3.99	1	25%	\$3.99
Propane		\$2.35	10	0%	\$23.50
Plastic Red Solo Drinking Cups for planting	150 Set	\$3.50	1	75%	\$3.50
Total Expenses		\$30.99			

2021

2021 Budget Statement and Income Goal

<u>Budget</u>	<u>Cost</u>
Propane	\$50.00
Zahara Zinnia Mix	\$6.99
Buttercrunch lettuce	\$3.99
Roma Tomato	\$5.99
Sweet Million Cherry Tomato	\$4.95
Morning Glory	\$4.95
Dianthus	\$4.95
Soil	\$20.00
Misc	\$20.00
Budget	\$121.82
<u>Income Goal</u>	<u>Amount</u>
From Lettuce	\$60
From Flowers	\$65
From Storing Plants	\$20
Total Income Goal	\$145

2021 Sales

Flower Sells - \$20

Tomato Sells - \$10

ButterCrunch Lettuce Sales- \$30

Total sold- \$60

Value of Products not sold but used at home
- \$83

2022

2022 Budget Statement and Income Goal

<u>Budget</u>	<u>Cost</u>
Propane	\$110.00
Flower Seeds	\$90.00
Buttercrunch lettuce and Vegetable seeds	\$16.00
Soil	\$80.00
Seed starting soil	\$30.00
Growing Lights	\$110.00
Greenhouse Repairs	\$59.00
Round Growing Pots	\$23.00
Hanging Baskets	\$46.00
Fertilizer	\$29.00
Labels for naming	\$12.00
Ect	\$20.00
Total Budget -	\$625.00
<u>Income Goal</u>	<u>Amount</u>
From Lettuce	\$80
From Flowers	\$650
From Vegetable Seedlings	\$120
Total Income Goal	\$850

2022 Sales

Sell at 4-H Center - \$290

Sell at Home -\$445

Total - \$735

Value Used At Home - \$100

2021 Expenses

<u>Items</u>	<u>Volume</u>	<u>Cost</u>	<u>Quantity</u>	<u>Leftover</u>	<u>Total</u>
Propane		\$2.33	25.00	0%	\$58.25
Zahara Zinnia Mix Improved Mix Gurneys (25 seeds)		\$6.99	1.00	0%	\$6.99
ButterCrunch Lettuce	1 packet (500 seeds)	\$3.99	1.00	50%	\$3.99
Roma Tomatoes	1 packet (150 seeds)	\$3.99	1.00	25%	\$3.99
Sweet Million Hybrid cherry tomatoes	1 packet (25 seeds)	\$5.99	1.00	0%	\$5.99
Morning Glory	1 packet (150 seeds)	\$4.95	1.00	0%	\$4.95
Dianthus	1 packet(150 seeds)	\$4.95	1.00	0%	\$4.95
Summer Squash	1 packet (25 seeds)	\$5.99	1.00	0%	\$5.99
Peppermint oil		\$19.99	1.00	65%	\$19.99
14-14-14 Osmocote Pelleted Fertilizer	1 Pound Bottle	13.5	1	0%	\$13.50
				Total-	\$128.59

2021 Received (items gifted to me) and SAE Labor Exchange

<u>Gifted Items</u>	<u>Value Worth</u>
24 random pots of different sizes	\$8.00
Pest Repel pouches	\$12.00
<u>SAE Labor Exchange</u>	
18 Succulents (From helping my brother with his class project)	\$13.50
Total Gifted and Exchanged	\$33.50

2022 Expenses

<u>2022</u>					
Items(Annually)	Cost	Quantity	Amount Left	Total Cost	
Propane	\$2.59	55.00	10 Gallons	\$142.45	
1.5LB (680g) 20-20-20 Jack's Fertilizer	\$18.99	1.00	30%	\$18.99	
1.5LB (689g) 20-6-22 Petunias Jack's Fertilizer	\$13.00	1.00	60%	\$13.00	
Bubble wrap (12" *72 ft 3/16" wrap) Pack of 2 rolls	\$16.65	1.00	75%	\$16.65	
Transparent Duct Tape, weather resistant for outdoor use (2" *20 yards)	\$12.88	1.00	0%	\$12.88	
300 Plastic Labels for naming	\$9.99	1.00	33%	\$9.99	
Miracle-Gro seed starting potting soil (2 pack 8 qt)	\$8.99	4.00	90%	\$35.96	
Miracle Moisture Control Potting Mix -2 cu ft	\$14.77	6.00	0%	\$88.62	
.7 Gallon (6.3" width) Pots (Pack of 15)	\$24.99	2.00	16%	\$49.98	
10 Plastic Hanging Baskets in bulk	\$44.99	1.00	0%	\$44.99	
Plastic Pots (4") (Pack of 200)	\$20.99	2.00	58%	\$41.98	
4 pack of chains with hanging hook and clamps for wooden planters (4 chains per)	\$11.85	2.00	0%	\$23.70	
Toothpicks and Plastic Wrap for Dome	\$4.17	1.00	0.00%	\$4.17	
30 pcs 2" screw eyes metal eye hooks	\$5.99	2.00	93%	\$11.98	
Misc	\$15.00	1.00	0%	\$15.00	
			Total Annual (Not counting seeds)-	\$530.34	
Seeds	Volume	Cost	Quantity	Amount Left	Total Cost
SnapDragons(Topper Hybrid) (Mixed Color)	1 packet (100 seeds)	\$5.95	1	0%	\$5.95
Salvia (Victoria)	1 packet (125 seeds)	\$4.95	1	35%	\$4.95
Geranium (Border Mix) (Mixed Colors)	1 packet (75 seeds)	\$6.45	1	0%	\$6.45

	1 packet (30 seeds)	\$6.95	1	0%	\$6.95
Impatiens (Candy Box) (Mixed Colors)	1 packet (30 seeds)	\$6.95	1	0%	\$6.95
Petunia (Supercascade White Hybrid)	1 packet (50 seeds)	\$4.45	1	0%	\$4.45
Petunia (Burpee's Best Hybrid) (Mixed Colors)	1 packet (50 seeds)	\$6.45	1	0%	\$6.45
Marigold (Boy O' Boy) (Mixed Colors)	1 packet (75 seeds)	\$5.45	1	25%	\$5.45
Coleus (Chocolate Mint)	1 capsule (25 seeds)	\$4.95	1	0%	\$4.95
Cosmos (Rosetta)	1 packet (50 seeds)	\$5.95	1	0%	\$5.95
Vinca (Arizona) (Mixed Colors)	1 packet (50 seeds)	\$5.95	1	0%	\$5.95
Tomato (Roma VF)	1 packet (150 seeds)	\$3.99	1	75%	\$3.99
Summer Squash(Black Magic)	1 packet (1/2 oz)	\$6.99	1	25%	\$6.99
Sweet Peppers (Hybrid Giant)	1 packet (35 seeds)	\$7.99	1	25%	\$7.99
Sweet Basil	1 packet (150 seeds)	\$4.99	1	50%	\$4.99
Siam Queen Basil	1 packet (150 seeds)	\$4.99	1	50%	\$4.99
Oregano	1 packet (250 seeds)	\$4.99	1	50%	\$4.99
Rosemary	1 packet (100 seeds)	\$4.99	1	50%	\$4.99
Lemon Balm Herb	1 packet (250 seeds)	\$4.99	1	50%	\$4.99
				Total Seeds Cost-	\$101.42

Total Capital Cost

<u>Capital Cost</u>	<u>Cost</u>	<u>Quantity</u>	<u>Total Cost</u>
2'X1.5' growing light	\$50.00	1.00	\$50.00
2' single growing lights- pack of 2	\$20.00	2.00	\$40.00
2.5 Gallon Watering Can	\$16.52	1.00	\$16.52
10 Pack of Propagation Trays (For seed starting) (20" * 10")	\$28.95	1.00	\$28.95
8'X5' Greenhouse Fixing Panels	\$55.78	2.00	\$111.56
			Total Capital Costs
			\$247.03

Received and Labor Exchange

<u>Received</u> (items gifted to me)	<u>Value</u>
Growing Pots	
Nails for hanging baskets	\$15
Skids to build hanging baskets	\$30
A variety of old pots different sizes from the community	\$55
65 Plastic Hanging baskets from a customer	\$98
1- 20 gallons 1-30 Gallon Propane Tanks	\$130
Plant Selling Stand (From Pohl's Pumpkin my other SAE)	\$100
New Heat Light bulb	
Total Received	\$428
<u>SAE Labor Exchange</u>	
Linseed Oil for greenhouse wood (Got in exchange for painting wooden decor in my families landscaping)	\$18
Electric (Parents Covered from providing them with lettuce)	\$83
Total Exchanged	\$100

Items Purchased for 2023

Items Purchased for 2023 in the year 2022 (WAS NOT PUT ON APPLICATION)			
Future Funds- FFA SAE Grant	\$1,000.00		
Other funds (not generated from this SAE project but are being productively invested to grow my business)			
Pohl Ag Service			
Pohl Farms			
Mowing Lawns on the side			
Growing Pumpkins			
<u>Items For 2023 Growing Season</u>	<u>Cost</u>	<u>Quality</u>	<u>Total Cost</u>
20" Box Fans	\$19.99	4	\$79.96
5 Shelf 2'X4' 82 inch tall shelving unit	\$149.99	1	\$149.99
2 CU FT Moisture Control Miracle potting soil (Sale)	\$11.49	4	\$45.96
2'X4' Spider Farm Led Grow Light	\$99.00	1	\$99.00
2'X4' Bloom Plus Led Grow Light	\$149.99	1	\$149.99
2 CU FT Moisture Control Miracle potting soil (Sale)	\$94.99	1	\$94.99
2'X1.5' growing light	\$50.00	1	\$50.00
Heat Mat with controls	\$19.99	1	\$19.99
2 Pack Seedling Heat Mat	\$22.78	1	\$22.78
10 Total 10" X 20" Propagation Trays	\$24.95	1	\$24.95
15 Total Seed Packets of Flower Seeds	\$74.69	1	\$74.69
Plastic Watering Sprinkler Nozzle For Plastic Bottles	\$6.99	1	\$6.99
		Total Spent during 2022 for 2023	\$819.29

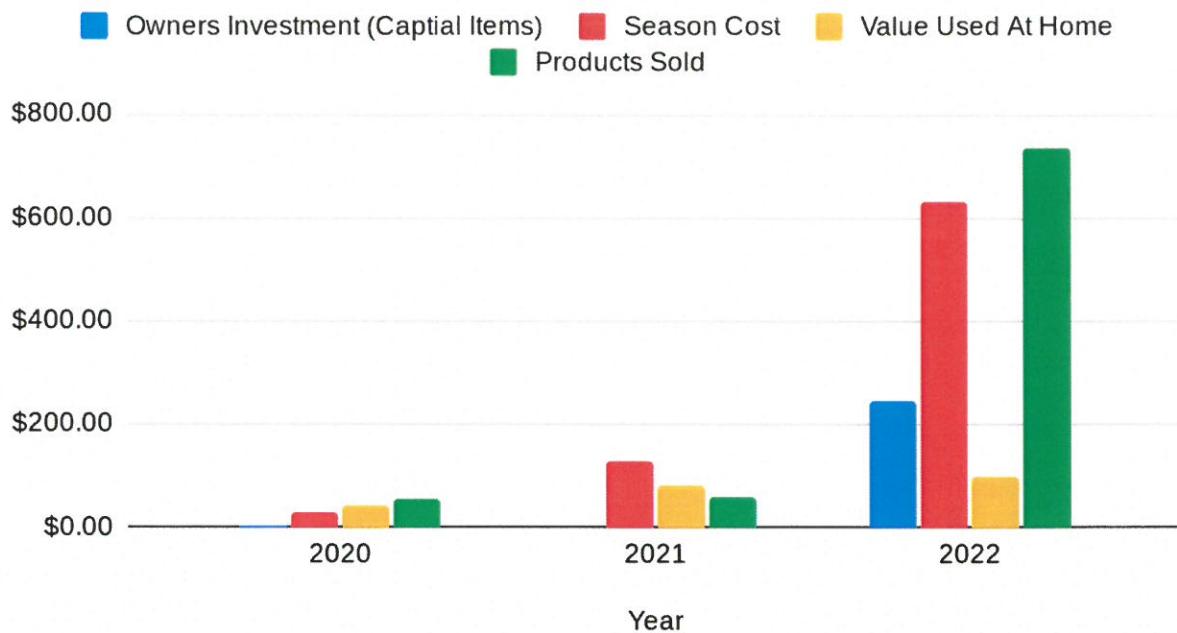
2023 Budget

Propane	\$2.59	55.00	10 Gallons	\$142.45	
1.5LB (680g) 20-20-20 Jack's Fertilizer	\$18.99	1.00	30%	\$18.99	
Transparent Duct Tape, weather resistant for outdoor use (2in *20 yards)	\$12.88	1.00	0%	\$12.88	
300 Plastic Labels for naming	\$9.99	1.00	33%	\$9.99	
Miracle-Gro seed starting potting soil (2 pack 8 qt)	\$8.99	4.00	90%	\$35.96	
Miracle Moisture Control Potting Mix -2 cu ft	\$11.49	6.00	0%	\$68.94	
Plastic Pots (4 inch) (Pack of 200)	\$20.99	2.00	58%	\$41.98	
4 pack of chains with hanging hook and clamps for wooden planters (4 chains per)	\$11.85	2.00	0%	\$23.70	
30 pcs 2in screw eyes metal eye hooks	\$5.99	2.00	93%	\$11.98	
Misc	\$15.00	1.00	0%	\$15.00	
			Total Anual-	\$381.87	
Seeds	Cost	Cost	Quantity	Left Over	Total Cost
SnapDragons(Topper Hybrid) (Mixed Color)	1 packet (100 seeds)	\$5.95	1	100%	\$5.95
Marigold, Snowball Hybrid	1 packet (50 seeds)	\$6.45	1	100%	\$6.45
Marigold (Boy O' Boy) (Mixed Colors)	1 packet (75 seeds)	\$5.45	1	125%	\$5.45
Geranium (Border Mix) (Mixed Colors)	1 packet (75 seeds)	\$6.45	1	100%	\$6.45
Impatiens (Candy Box) (Mixed Colors)	1 packet (30 seeds)	\$6.95	1	100%	\$6.95
Petunia (Supercascade White Hybrid)	1 packet (50 seeds)	\$4.45	1	100%	\$4.45
Petunia (Burpee's Best Hybrid) (Mixed Colors)	1 packet (50 seeds)	\$6.45	1	100%	\$6.45

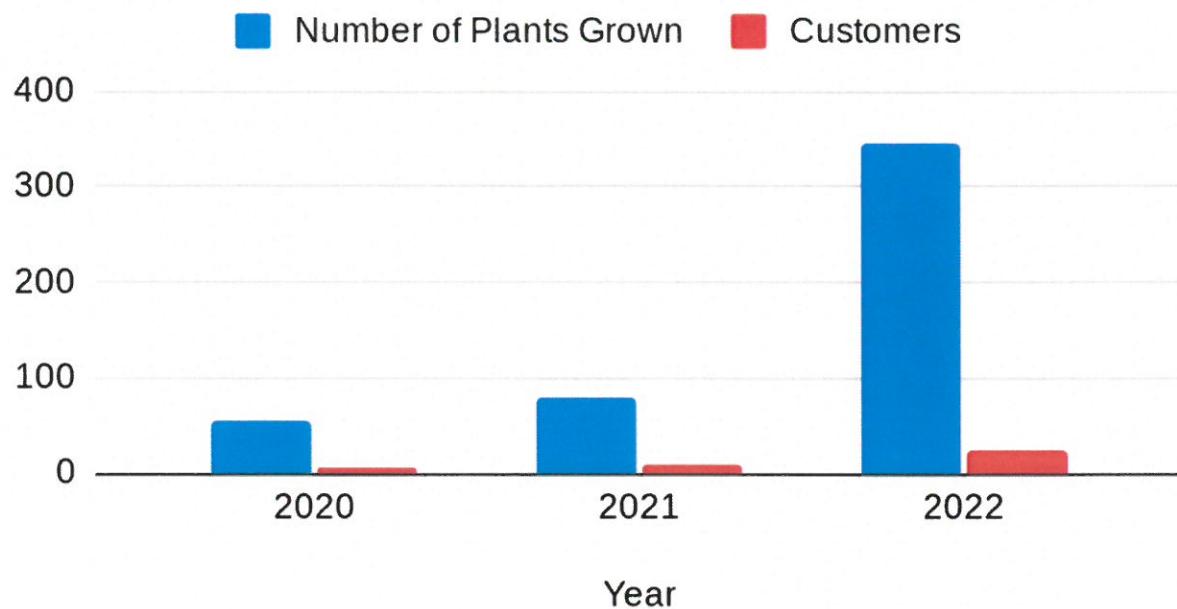
Petunia, Blueberry Lime Jam Mix	1 capsule (10 Pelleted Seeds)	\$4.45	1	100%	\$4.45
Petunia, Spreading, Shock Wave Denim	1 capsule (10 Pelleted Seeds)	\$4.95	1	100%	\$4.95
Coleus (Chocolate Mint)	1 capsule (25 seeds)	\$4.95	1	100%	\$4.95
Begonia, Dragon Wing® Red Hybrid	1 packet (25 seeds)	\$6.95	1	100%	\$6.95
Vinca (Arizona) (Mixed Colors)	1 packet (50 seeds)	\$5.95	1	100%	\$5.95
Summer Squash(Black Magic)	1 packet (1/2 oz)	\$6.99	1	125%	\$6.99
Sweet Peppers (Hybrid Giant)	1 packet (35 seeds)	\$7.99	1	125%	\$7.99
Sweet Basil	1 packet (150 seeds)	\$4.99	1	50%	\$4.99
Siam Queen Basil	1 packet (150 seeds)	\$4.99	1	50%	\$4.99
Oregano	1 packet (250 seeds)	\$4.99	1	50%	\$4.99
Rosemary	1 packet (100 seeds)	\$4.99	1	50%	\$4.99
Lemon Balm Herb	1 packet (250 seeds)	\$4.99	1	50%	\$4.99
Echinacea, Marry Me	1 packet (50 seeds)	6.95	1	100%	\$6.95
Pansy, Atlas Mix	1 packet (35 seeds)	\$4.95	1	100%	\$4.95
Rudbeckia, Goldsturm	1 packet (100 seeds)	\$5.95	1	100%	\$5.95
Tomato (Roma VF)	1 packet (150 seeds)	\$3.99	1	75%	\$3.99
				Total For Seeds	\$127.18
				With discount	With 20% of
					\$101.75
Capital Items	Cost				
Shade Cloths		\$23.00			
Thermostat for greenhouse heater		\$28.00			
Total Capital		\$51.00		Total For All	\$534.62

Business Growth Graphs

Pohl's Greenhouse Growth



Number of Plants Grown Vs Customers



Crop Plan

2022 Crop Plan Calendars

Attached

2023 Crop Plan Calendars

Attached

Documentation

Past records of bloom time and germination time

Attached

All Greenhouse current Pots

Attached

Advertising Flier PDF For 2023

Attached

Customer Review

Attached

Land and Electric Agreement

Attached

SAE Grant Press Release

Attached

Advisor Statement

Attached

2022 Crop Plan Calendar

JANUARY 2022						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15 Plant Geranium Set 1 Plant Snapdragon Set 1 Plant Salvia Set 1 Plant Vinca Set 1
16	17	18	19	20	21	22 Plant Geranium Set 2 Plant Snapdragon Set 2 Plant Salvia Set 2 Plant Impatiens set 2
23	24	25	26	27	28	29 Plant petunia set 1
30	31	1	2	3	4	5

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2022 Crop Plan Calendar

FEBRUARY 2022						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30	31	1	2	3	4	5 Plant petunia set 2
6	7	8	9	10	11	12 Plant cosmos set 1
13	14	15	16	17	18	19 Plant cosmos set 2 Plant coleus set 1
20	21	22	23	24	25	26 Plant coleus set 2 Plant marigold set 1 Presidents' Day
27	28	1	2	3	4	5

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2022 Crop Plan Calendar

MARCH 2022

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
27	28	1	2	3	4	5 Plant marigolds set 2
6	7	8	9	10	11	12 Plant Herbs
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	1	2

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2022 Crop Plan Calendar

APRIL 2022

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
27	28	29	30	31	1	2
3	4	5	6	7	8	9 All impatiens have bloom Petunias are starting to
10	11	12	13	14	15	16 First Sale Plants that have bloomed(petuni as impatiens, cosmos, marigolds)
17	18	19	20	21	22	23 Second Sale
24	25	26 4-H Sale	27 24/7 Plant Stand Sale	28 24/7 Plant Stand Sale	29 24/7 Plant Stand Sale	30

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2023 Crop Plan

The planting dates below are based on the time frame which it took to bloom the flowers last year plus one week before the sale to assure blooming. Since heat mats were used, I figured the germination times and the plant development would increase. This information was factored into the planting dates. The new flowers which I will grow in 2023 include pansies and begonias. I researched how long until maturity and added a week to the expected time to be sure of blooms. I hope to record the times of bloom and germination in 2023, so I can do a comparison to last year's data.

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2023 Crop Plan

JANUARY 2023						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7
8	9	10	11 Plant Vincas (Darkness)	12	13	14 Plant begonias
15	16	17	18 Plant Geranium (bottom Heat) Plant Snapdragons	19	20	21 Plant Pansy (Darkness)
22	23	24	25	26	27	28
29	30	31	1	2	3	4

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2023 Crop Plan

FEBRUARY 2023						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
29	30	31	1	2	3	4 Plant Petunias (Bottom Heat) Plant impatiens (Bottom Heat)
5	6	7	8	9	10	11 Plant Coleus (Bottom Heat)
12	13	14	15	16	17	18 Plant Herbs (Bottom Heat)
19	20	21	22	23	24	25 Plant Herbs Plant Marigolds (Bottom Heat)
26	27	28	1	2	3	4

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2023 Crop Plan

MARCH 2023						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26 Plant Tomatoes Plant Peppers	27	28	29	30	31	1

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2023 Crop Plan

APRIL 2023						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
26	27	28	29	30	31	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22 Get everything Blooming Goal Dates
23	24	25	26	27	28	29 First Sale
30 Sale Plants	1	2	3	4	5	6

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2023 Crop Plan

MAY 2023						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
30	1 Sale Plants	2 Sale Plants on stand	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3

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Germination 2022

January 2022

19 - Geraniums Germinated
22 - Snapdragons Germinated
25 - Salvia Germinated
27 - Geraniums Set 2 Germinated
30 - Snapdragons Set 2 Germinated

February 2022

3 - impatiens germinated
3- Petunia Mix Germinated
4 - Petunia White Germinated
9 - Petunia Mix set 2 Germinated
11 - Petunia White set 2 Germinated
20 - Cosmos Germinated
28 - Cosmos Set 2 Germinated

March 2022

5 - Coleus Germinated
5 - Marigolds Germinated
10 - Marigolds Set 2 Germinated

Vinca Germination - unknown

2022 Bloom Dates

April

9 - Impatiens Bloomed - 11 weeks
16 - Petunias bloomed - 11 weeks
21 - All marigolds have bloomed - 9 weeks
25 - cosmos have bloomed -12 weeks
29 - snapdragons started - 14 weeks
30 - Geraniums are starting - 15 weeks

May

7 - Salvia Bloomed - 16 weeks

Greenhouse Pots information

<u>In Attic Storage</u>				
<u>Pots</u>		<u>Total</u>	<u>Width</u>	<u>Height</u>
Hanging Basket		30	10.5	6.5
Hanging Basket		30	9.5	6
Hanging Basket		5	8.75	7.75
Round plastic pot		2	9.5	9
Round plastic pot		59	8.5	6
Round plastic pot		28	8.5	5.5
Round plastic pot		22	8	6
Round plastic pot		7	8	5.75
Round plastic pot		3	8	5.25
Round plastic pot		5	7.75	5
Round plastic pot		10	7	4
Round plastic pot		16	6.5	5
Round plastic pot		65	6	6
Round plastic pot		7	6	5.75
Round plastic pot		14	6	4.5
Round plastic pot		22	6	4.25
Round plastic pot		47	6	4
Round plastic pot		5	4.5	4
Round plastic pot		11	4	5
Round plastic pot		2	4	4
Square plastic pot		14 4 X 4		3.75
Total		404		
Propagation Trays		11 10 X 20		
10 Seed Cell Tray		5 9.75 X 4		2
18 Seed Cells Tray		7 10.5 X 5.5		2.25
4 Seed Cells Tray		13 5.25 X 3.5		2.25
4 Seed Cells Trays		11 5.25 X 5.25		2.25
6 Seed Cells Trays		8 8.25 X 6.25		2
105 Seed Cell Tray		1 10.5 X 21		1
<u>In Greenhouse</u>				
Round plastic pot		6	6.5	5
Round plastic pot		55	6	6
Round plastic pot		6	5	5.25
Round plastic pot		5	5	4.5
Round plastic pot		5	4.25	4
Round plastic pot		2	3.75	5.5
Round plastic pot		52	3.75	3
Square plastic pot		4	3.5	3.5
Round plastic pot		22	3	3
Total		157		

Pohl's Greenhouse Spring Plant Sale



Sale Dates

April 29 and 30
May 6 and 7
May 8 - Stand
Open 24/7



More Information

Scan the QR Code or visit
Pohl's Greenhouse on
google or visit our facebook
page

Analysis the Data of Customer Reviews

I thought it would be a good idea at the very end of the year to send out a google form to previous customers to get their feedback on the past year. This was done so I could adapt to the ever-changing customer preferences and maximize the customer experience for the upcoming year growing season. Also, I wanted to design this to get customers excited and thinking about the greenhouse. The goal was to ask questions about what I could have done better last season and what they wanted to see for the upcoming year.

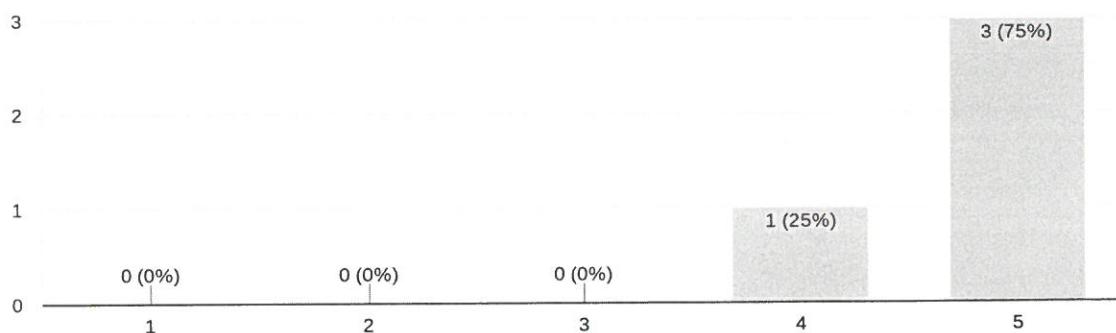
A big concern was when customers were asked to rate the greenhouse they always went with the highest rating except for once. Also, the limited number of customers who answered the survey was a big concern for the support of the greenhouse. This small volume of data also meant I had less to base my results on.

Although many of the questions were not very helpful, there was some good data about what the customers wanted in 2023. Some of this data included what flowers and services they would buy/use in 2023. From this data, I was able to indicate that the majority of the customers wanted perennial plants, more customer pots, delivery for an extra cost, and a lot more flower types. Another success was I was able to get some customer emails and some more ratings on google.

Next year, I am planning on sending this document to many more customers to get more data. Also, I plan on changing the rating questions to be more specific. Next year, I also want to send a form to non-Pohl's Greenhouse customers to gather more information and to get more customers.

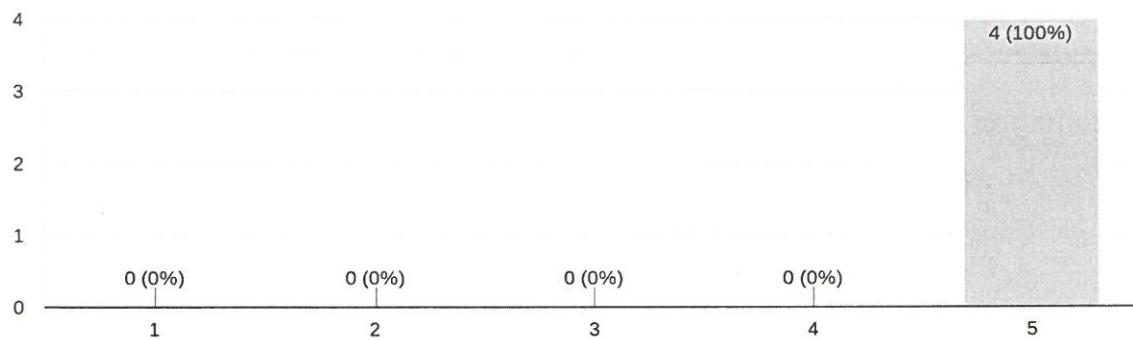
Out of 1-5 please rate how reasonable are hours were? (1 being the least, 5 being the most)

4 responses



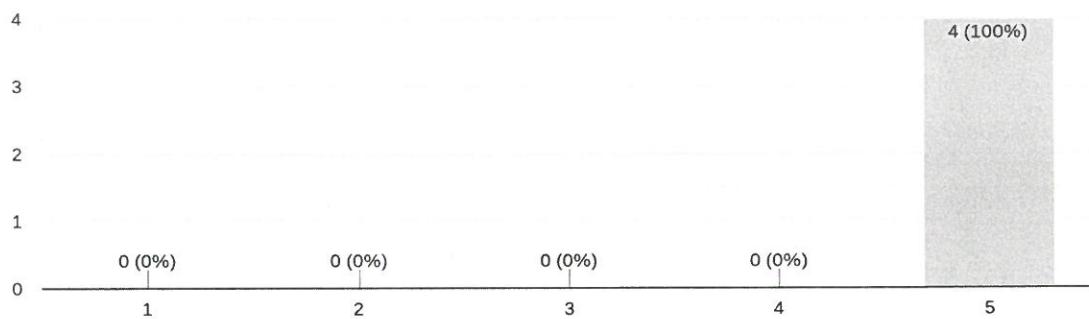
Out of 1-5 please rate are selection of plants? (1 being the least, 5 being the most)

4 responses



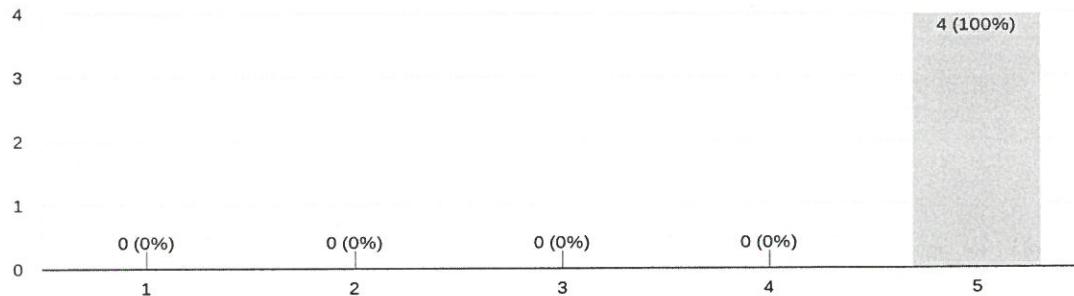
Out of 1-5 please rate if we have good quality of products for the price ? (1 being the least, 5 being the most)

4 responses



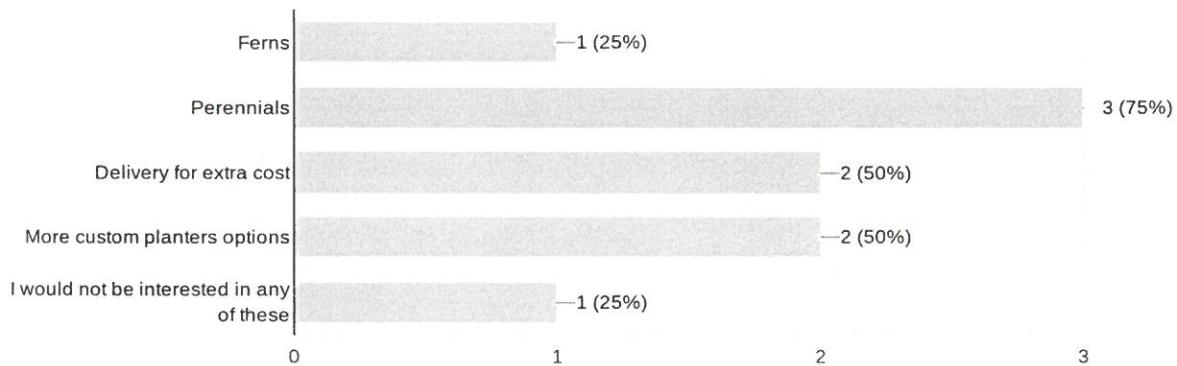
Out of 1-5 please rate are custom planters (If purchased)? (1 being the least, 5 being the most)

4 responses



What new products or services would you use in 2023?

4 responses



What specific flower should we add next year?

4 responses

Daisy, roses

Butterfly bush, bee balm, bleeding heart

Begonias

mums

Any other recommendations for 2023?

2 responses

Zinnia, and Salvia

Herbs

Enter your email if you want to subscribe to our email updates

2 responses

kittyesong@aol.com

tona.smith@sgibson.k12.in.us

Entrepreneurship Agreement between Isaac Pohl and
Timothy and Angela Pohl

The dates for this agreement are 2019 to 2023.

Party 1: Isaac Pohl

Will provide:

Isaac will provide detailed plans to Timothy and Angela Pohl when making important decisions which could affect the property. Isaac will provide the labor necessary to maintain the land to the standards set by Timothy and Angela Pohl. He will also be responsible for providing the family with vegetable starts including tomatoes, squash, peppers, and lettuce (as payment for rent). Isaac will also be responsible to purchase the rest of the equipment necessary to operate the greenhouse beyond the greenhouse and heating system as part of his 2019 Christmas gift.

Party 2: Timothy and Angela Pohl

Will provide:

Timothy and Angela Pohl will provide Isaac with electricity to operate the greenhouse along with any other electrical equipment approved by Timothy Pohl. They will also provide Isaac with 83 sq feet of land for his greenhouse up to a 10 sq. ft. area in the basement to start plants, and a room in the garage if there are heating issues.

Signatures:

Isaac Pohl

Printed Name (FFA Member)

Isaac Pohl

1-23-2023

Signature

Date

Timothy Pohl and Angela Pohl

Printed Name

Timothy Pohl and Angela Pohl

Signature

Date



Local FFA Member Receives Grant from *Bob Evans Restaurant*

A \$1,000 Plant System SAE grant has been awarded to Isaac Pohl of Haubstadt, Indiana by Bob Evans Restaurant.

SAE grants are designed to help FFA members create or expand Supervised Agricultural Experience (SAE) projects, a requirement that all FFA members must complete. An SAE requires FFA members to create and operate an agriculture related business, work at an agriculture-related business or conduct an agricultural research experience. Upon completion, FFA members must submit a comprehensive report regarding their career development experience.

This year 30 different sponsors funded SAE Grants. A full list of sponsors can be found on the National FFA Organization website on the SAE Grants webpage.

Pohl is a member of the Gibson Southern FFA Chapter. Their application was selected from among 1,296 applications nationwide.

The National FFA Organization is a school-based national youth leadership development organization of more than 850,000 student members as part of 8,995 local FFA chapters in all 50 states, Puerto Rico and the U.S. Virgin Islands.

#

About National FFA Organization

The National FFA Organization is a school-based national youth leadership development organization of more than 735,000 student members as part of 8,817 local FFA chapters in all 50 states, Puerto Rico and the U.S. Virgin Islands. The FFA mission is to make a positive difference in the lives of students by developing their potential for premier leadership, personal growth and career success through agricultural education. For more, visit the National FFA Organization online at FFA.org and on Facebook and Twitter.

About National FFA Foundation

The National FFA Foundation builds partnerships with industry, education, government, other foundations and individuals to secure financial resources that recognize FFA member achievements, develop student leaders and support the future of agricultural education. A separately registered nonprofit organization, the foundation is governed by a board of trustees that includes the national FFA president, educators, business leaders and individual donors. For more, visit FFA.org/Give.

Gibson Southern High School FFA



Jessie Schermerhorn-Mraz, Advisor
3499 W 800 S
Fort Branch, IN 47648
812.753.3011 ext.
jessie.mraz@sgibson.k12.in.us

To whom it may concern,

For the past three years I have had the privilege of as an FFA member and agriculture student. Isaac has chosen to take on a dynamic entrepreneurship SAE and start his own greenhouse business called Pohl's Greenhouse.

Isaac received a hobby greenhouse as a gift from his parents for Christmas in 2019. In 2020, he used the greenhouse to grow plants for a neighbor. The next year he wanted to earn a profit from his greenhouse and began growing plants for sale. As each year has passed, he has increased his plant variety offerings and problem solved ways to make his business more profitable.

Due to COVID our largest greenhouse business in the county closed permanently; leaving the perfect opportunity for other greenhouse businesses to open. Isaac identified this opportunity in our area and is working to meet this need.

Isaac applied for an SAE Grant through National FFA this fall. During the application process Isaac reflected on the strengths and weakness of his business. This process has opened his eyes to the many aspects of owning and operating one's own business. He was successful in receiving this grant and will be able to expand his business quicker than he previously thought was possible for this growing season.

It is with great pleasure I recommend Isaac Pohl as a candidate for the Nursery Operations Entrepreneurship Proficiency Award.

Sincerely,

Jessie Mraz

Agriculture Instructor
FFA Advisor