

Final Report

Alternative Prairie Orchard Model Comparisons

Alberta Agriculture and Forestry

Prepared by: Rod Turner
February 12, 2018
Fenceline Enterprises Ltd.
Box 89
Amisk, Alberta.
T0B 0B0
Phone: (780) 856-3344
Cell: (780) 888-1886
Fax: (780) 856-3345
Email: FencelineEnt@gmail.com

Acknowledgements:

Special appreciation to a number of individuals who aided this project with a wealth of information regarding production, marketing and economics of orchard production. The cooperation from these individuals were beneficial in providing a variety of alternative models for investors to consider if purchasing or leasing an orchard.

Major contributors include Dean Dyck, Marsha Gelowitz and Robert Spencer.

“Funding for this work was provided by Growing Forward 2:
A Federal/Provincial/Territorial Initiative”.

Introduction:

The information in the following document presents economic comparisons and considerations for several business models of mature prairie orchards, as well as a Start Up Saskatoon Orchard. The basis for comparison is a Going Concern Model of a Prairie Orchard with a Start Up Saskatoon Orchard to provide additional information. Comparisons are based on Saskatoon berries; however, by changing some assumptions, the information contained within this document could be used for other berry types. Other business orchard models considered include a Cooperative Model, various Crop Sharing models (Renter's perspective; Owner's perspective; Renter owning equipment; Renter renting equipment from owner), and various models of a Rejuvenated Orchard (Owner Operated; Custom Operated; Hired Manager). The following report was completed using a variety of different industry revenue and expense structures from a ten year period. The data represented within this document should be used only as a general guideline and interested investors are encouraged to research their own revenue and expenses pertinent to the specific prairie orchard operation they are considering.

Definitions:

Rejuvenation – the process of removing all vegetation of an established/overgrown orchard to the ground, allowing new plant growth to occur and the orchard to return to full, healthy productivity

Going Concern – the assumption that an orchard is actively producing and will remain productive for the foreseeable future

Gross Revenue – income derived from the sale of fruit

Production Expenses – any cost associated with production of fruit, for example, fertilizer, pesticides, and custom work

Operating Expenses – any cost associated with operating an orchard, for example, fuel, repairs and maintenance, and utilities

Labour Expenses – paid employee wages and estimated unpaid employee wages

Total Variable Expenses – Includes all Production, Operating and Labour Expenses

Contribution Margin – Amount remaining after Total Variable Expenses to cover Fixed Expenses: Gross Revenue less Total Variable Expenses (Total Production + Total Operating + Total Labour)

Operating Interest – Interest charged on a Farm Operating Loan

Fixed Expenses – Includes Operating Interest, Depreciation of Buildings and Machinery

Gross Margin – Indicates funds remaining to cover unallocated fixed expenses, unpaid labour and return to operator's equity. Gross Revenue - Production Expenses - Operating Expenses - Paid Labour - Operating Interest

Overall Project Assumptions:

- Yields are based on historical Cost of Production data which include at least one significant loss due to weather related events in any 10 year period.
- Prices are based on historical Cost of Production data and industry price surveys. Prices would vary depending on which market channel, wholesale or direct market, is chosen. Direct market channels, like U-picks and Farmer's Markets, tend to bring higher prices. Wholesale prices to processors or other buyers will typically vary depending on the amount of post-harvest handling that has taken place prior to final delivery (e.g. sorting, grading, etc.), as processors will not tend to absorb them, in most cases.
- The costs of pruning in an orchard can vary significantly. Intensive pruning to remove larger branches, diseased material and to ensure that an orchard remains young and productive, can remove between 10 and 25 percent of plant material on an annual basis. The 10% used in the models assumes a high level of management with low levels of disease and average canopy growth. The amount of pruning will vary with location, variety of crop and other factors.
- Production, Operating and Labour expenses are based on historical Cost of Production data and as well as current information provided through interviews with growers.
- Fixed expenses are based on previous Saskatoon Berry Cost of Production studies and current information provided through interviews.
- Revenue and Expenses are on a per acre basis.
- Start Up Orchard is assumed to be 0-10 years of age while other models in this comparison are over 10 years of age.
- Additional Assumptions are provided with each specific model scenario
 0. Start Up Orchard
 1. Going Concern
 2. Going Concern – Cooperative
 3. Crop Share – 2/3:1/3 (2/3 to Renter)
 4. Crop Share – 2/3:1/3 (1/3 to Owner)
 5. Crop Share – Renter using own equipment
 6. Crop Share – Renter renting Equipment from Owner
 7. Rejuvenated Orchard – Owner Operated
 8. Rejuvenated Orchard – Custom Operated
 9. Rejuvenated Orchard – Hired Manager

Orchard Model Comparisons

Model 0: Start Up Model

The Start Up Model is utilized to see the approximate cost of starting an orchard and using this as an additional information source when analyzing the Going Concern, Crop Share and Rejuvenation Models to determine if they are economically feasible. This model uses

information gathered from previous Cost of Production studies. It is assumed that the orchard has been planted and is less than 10 years old.

Model Assumptions:

- Orchard is in its first 10 years of production and considered a Start Up Orchard
- Orchard is equipped with necessary machinery, equipment and buildings for operation
- Orchard is routinely maintained with no major pest pressure
- Intensive pruning may occur on up to 10% of the orchard size on any given year, however pruning requirements may be higher depending on a range of factors. 10% pruning assumes a high level of orchard management and health with average growth.
- Pruning cost is calculated on hours per acre. Based on information gathered, it takes approximately 20 hours to prune 1 acre (\$15/hour wage)
- Yields will range from 575 – 3000 lbs. per acre with a 10 year average yield of 1355 lbs

Model Analysis: Table 0 provides the data for a Start Up Orchard. The Start Up Orchard will be used as a source of information when analyzing other models within this study. Readers will be able to use this as a guideline to compare their actual expenses to and/or review potential expenses of investing in an established orchard versus starting a new orchard. Table 0a shows the 10 year averages for the major categories from Table 0.

Table 0a: Summary Data of Table 0 Start Up Model (per acre)

<i>Yield (lbs.)</i>	1355
<i>Revenue</i>	\$ 2710
<i>Production Expenses</i>	\$ 745
<i>Operating Expenses</i>	\$ 670
<i>Labour Expenses</i>	\$ 498
<i>Total Variable Expenses</i>	\$ 1913
<i>Fixed Expenses</i>	\$ 1741
<i>Contribution Margin</i>	\$ 797
<i>Gross Margin</i>	\$ 1000

Model 1: Going Concern Model

The Going Concern Model is used as a baseline to compare to the other alternative mature orchard models. This model uses information gathered from previous Cost of Production studies. In this model, it is assumed that the orchard is currently in full production and does not require rejuvenation, only regular maintenance.

Model Assumptions:

- Orchard is equipped with necessary machinery, equipment and buildings for operation
- Orchard is routinely maintained with no major pest pressure
- Intensive pruning may occur on up to 10% of the orchard size on any given year; 10% pruning assumes a high level of orchard management and health with average growth. However, pruning requirements may be higher depending on a range of factors.
- Pruning cost is calculated based on hours per acre. Based on information gathered it takes approximately 20 hours to prune 1 acre (\$15/hour wage)
- Yields will range from 1500 – 4000 lbs. per acre with a 10 year average yield of 2650 lbs

Model Analysis: Table 1 provides the data for a Going Concern Orchard. This model will be used as a baseline (average) comparison for all other models of mature orchards. Readers will be able to use this as a guideline to compare their actual expenses to and/or review potential expenses of investing in an orchard. Table 1a shows the Going Concern Orchard 10 year averages for the major categories from Table 1.

Table 1a: Summary Data of Table 1

	<i>Going Concern Model (per acre)</i>	<i>Start Up Model (per acre)</i>
<i>Yield (lbs.)</i>	2650	1355
<i>Revenue</i>	\$ 5300	\$ 2710
<i>Production Expenses</i>	\$ 600	\$ 745
<i>Operating Expenses</i>	\$ 770	\$ 670
<i>Labour Expenses</i>	\$ 485	\$ 498
<i>Total Variable Expenses</i>	\$ 1855	\$ 1913
<i>Fixed Expenses</i>	\$ 1739	\$ 1741
<i>Contribution Margin</i>	\$ 3445	\$ 797
<i>Gross Margin</i>	\$ 3592	\$ 1000

Model 2: Going Concern - Cooperative Model

The Going Concern-Cooperative Model is to be used for those orchards sharing a harvester between three orchards. All other machinery required for the orchard is very hard to share, so it is assumed that each orchard will have all other equipment, buildings and cooler space for harvesting, sorting and storing the fruit. In this model, revenue and expenses will remain similar to that of the Going Concern model, with the exception of the expenses associated with the harvester. Since the orchard is a Going Concern, regular maintenance of the orchard is required.

Model Assumptions:

- Each orchardist will be required to have their own cooler/freezer space for storage
- Each orchardist will market fruit at their own discretion
- Rejuvenation of orchard is not required as is considered a “Going Concern”
- Regular Maintenance of Orchard is up to date with no major pest pressure
- Intensive pruning may occur on up to 10% of the orchard size on any given year; 10% pruning assumes a high level of orchard management and health, with average growth. However, pruning requirements may be higher depending on a range of factors
- Pruning cost is calculated on hours per acre. Based on information gathered, it takes approximately 20 hours to prune 1 acre (\$15/hour wage)
- Harvesting equipment will be shared between three (3) orchardists

Model Analysis: Table 2 provides data on a Going Concern and Going Concern-Cooperative Model. The spreadsheet shows the breakdown of revenue and expenses per acre for sharing harvesting equipment. It may be beneficial for the cooperative orchards to be growing different fruit varieties to try to take advantage of different maturing times to minimize conflict with harvesting times so that harvesting would commence at different times. This minimizes the issue of who gets the machine first. Table 2a provides comparative numbers on a Cooperative model vs. Going Concern.

<i>Table 2a: Summary of Table 2</i>	<i>Cooperative Model (per acre)</i>	<i>Going Concern Model (per acre)</i>	<i>Start Up Model (per acre)</i>
<i>Yield (lbs.)</i>	2650	2650	1355
<i>Revenue</i>	\$ 5300	\$ 5300	\$ 2710
<i>Production Expenses</i>	\$ 600	\$ 600	\$ 745
<i>Operating Expenses</i>	\$ 754	\$ 770	\$ 670
<i>Labour Expenses</i>	\$ 485	\$ 485	\$ 498
<i>Total Variable Expenses</i>	\$ 1839	\$ 1855	\$ 1913
<i>Fixed Expenses</i>	\$ 1416	\$ 1739	\$ 1741
<i>Contribution Margin</i>	\$ 3461	\$ 3445	\$ 797
<i>Gross Margin</i>	\$ 3608	\$ 3592	\$ 1000

With a Going Concern-Cooperative Model that shares a harvester between 3 orchards, there is little change to the numbers compared with a Going Concern orchard. However, there are some small differences:

- Operating and Total Variable Expenses are lower due to the sharing of repairs and maintenance between the 3 cooperative members

- Fixed Expenses decrease due to harvesting equipment being shared 1/3 per orchard
- Contribution and Gross Margin increase slightly due to the sharing of harvesting equipment depreciation and the decrease in repairs and maintenance

Model 3: Crop Share Model – 2/3 to Renter

This Crop Share Model – 2/3 to Renter is used for those considering renting an orchard that is a Going Concern. The renter has equipment, buildings and cooler space for harvesting, sorting and storing the fruit. Since the orchard has been a Going Concern, regular maintenance of the orchard is required. In this model, 2/3 of the revenue and expenses will be to the account of the renter.

Model Assumptions:

- Each orchardist will be required to have their own cooler/freezer space for storage
- Each orchardist will market fruit at their own discretion
- Rejuvenation of orchard is not required as it is considered a “Going Concern”
- Regular Maintenance of Orchard is up to date with no pest issues noticeable
- Intensive pruning may occur on up to 10% of the orchard size on any given year; 10% pruning assumes a high level of orchard management and health with average growth. However, pruning requirements may be higher depending on a range of factors.
- Pruning is calculated based on labour hours per acre. Based on information gathered it takes approximately 20 hours to prune 1 acre (\$15/hour wage)

Model Analysis: Table 3 provides data on a 2/3 crop share model for the renter. The spreadsheet shows the breakdown of revenue and expenses for the renter so that they are able to approximate orchard profit/loss. Table 3a provides comparative numbers on the 2/3 share of the Renter vs. Going Concern.

<i>Table 3a: Summary of Table 3</i>	<i>Crop Share – 2/3 Renter (per acre)</i>	<i>Going Concern Model (per acre)</i>	<i>Start Up Model (per acre)</i>
<i>Yield (lbs.)</i>	1767	2650	1355
<i>Revenue</i>	\$ 3533	\$ 5300	\$ 2710
<i>Production Expenses</i>	\$ 400	\$ 600	\$ 745
<i>Operating Expenses</i>	\$ 513	\$ 770	\$ 670
<i>Labour Expenses</i>	\$ 323	\$ 485	\$ 498
<i>Total Variable Expenses</i>	\$ 1237	\$ 1855	\$ 1913
<i>Fixed Expenses</i>	\$ 1673	\$ 1739	\$ 1741
<i>Contribution Margin</i>	\$ 2297	\$ 3445	\$ 797
<i>Gross Margin</i>	\$ 2395	\$ 3592	\$ 1000

Comparing these numbers to a Going Concern Orchard, revenue is decreased by 1/3 paid to the owner, as well as some expenses are decreased by the 1/3 share paid by the owner of the orchard. The following are some points for consideration:

- All Revenue and Variable Expenses (Production, Operating & Labour) are 2/3 of what a Going Concern orchard's numbers
- Fixed Expenses – Operating Interest is 2/3 of a Going Concern Model
- Fixed Expenses – Equipment and Building Depreciation is full amount as each orchard has a full line of equipment
- Contribution and Gross Margin are reduced by 1/3 due to the portion being received by the orchard owner

Model 4: Crop Share Model – 1/3 to Owner

The Crop Share Model – 1/3 to Owner is used for those considering renting out an orchard that is a Going Concern, to someone already in operation separately whom is looking to expand. The owner of the orchard and the renter each have equipment, buildings and cooler space for harvesting, sorting and storing their portion of the fruit. Since the orchard has been a Going Concern, regular maintenance of the orchard is required. This model is similar to the Crop Share – 2/3 to Renter, but the economic analysis is from the perspective of the owner, with 1/3 of the revenue and expenses to the account of the owner.

Model Assumptions:

- Each orchardist will be required to have their own cooler/freezer space for storage
- Each orchardist will market fruit at their own discretion
- Rejuvenation of orchard is not required as is considered a “Going Concern”
- Regular Maintenance of Orchard is up to date with no pest issues noticeable
- Intensive pruning may occur on up to 10% of the orchard size on any given year; 10% pruning assumes a high level of orchard management and health, with average growth. However, pruning requirements may be higher depending on a range of factors.
- Pruning is calculated based on hours per acre. Based on information gathered it takes approximately 20 hours to prune 1 acre (\$15/hour wage)

Model Analysis: Table 4 provides data on a 1/3 crop share model for the owner. The spreadsheet shows the breakdown of revenue and expenses for the owner so that they are able to approximate orchard profit/loss. Table 4a provides comparative numbers on the Owner's 1/3 vs a Going Concern.

<i>Table 4a: Summary of Table 4</i>	<i>Crop Share – 1/3 Owner (per acre)</i>	<i>Going Concern Model (per acre)</i>	<i>Start Up Model (per acre)</i>
<i>Yield (lbs.)</i>	883	2650	1355
<i>Revenue</i>	\$ 1767	\$ 5300	\$ 2710
<i>Production Expenses</i>	\$ 200	\$ 600	\$ 745
<i>Operating Expenses</i>	\$ 257	\$ 770	\$ 670
<i>Labour Expenses</i>	\$ 162	\$ 485	\$ 498
<i>Total Variable Expenses</i>	\$ 618	\$ 1855	\$ 1913
<i>Fixed Expenses</i>	\$ 1606	\$ 1739	\$ 1741
<i>Contribution Margin</i>	\$ 1148	\$ 3445	\$ 797
<i>Gross Margin</i>	\$ 1197	\$ 3592	\$ 1000

Comparing these numbers to a Going Concern Orchard, revenue and some expenses are decreased by the Renter’s share of 2/3. The following are some points for consideration:

- All Revenue and Variable Expenses (Production, Operating & Labour) are 1/3 of what a Going Concern orchard’s numbers
- Fixed Expenses – Operating Interest is 1/3 of a Going Concern Model
- Fixed Expenses – Equipment and Building Depreciation is full amount as each orchard has a full line of equipment
- Contribution and Gross Margin are decreased by 2/3 due to the portion being received by the renter

Model 5: Crop Share Model – Renter Renting Equipment from Owner

The Crop Share Model – Renter Renting Equipment from Owner is used for those considering renting a Going Concern orchard; however, the Renter has no equipment or buildings. The owner who is renting out the orchard has equipment, buildings and cooler space for harvesting, sorting and storing the fruit. Since the orchard has been a Going Concern, regular maintenance of the orchard is required. In this model, revenue and expenses will be shared equally between the orchard owner and the renter.

Model Assumptions:

- Renter will rent the orchard owner’s equipment, buildings and cooler/freezer space for storage
- Each orchardist will market fruit at their own discretion
- Rejuvenation of orchard is not required as is considered a “Going Concern”

- Regular Maintenance of Orchard is up to date with no pest issues noticeable
- Intensive pruning may occur on up to 10% of the orchard size on any given year; 10% pruning assumes a high level of orchard management and health, with average growth. However, pruning requirements may be higher depending on a range of factors.
- Pruning is calculated based on hours per acre. Based on information gathered it takes approximately 20 hours to prune 1 acre (\$15/hour wage)

Model Analysis: Table 5 provides data on a 50% crop share model for the Renter. The spreadsheet shows the breakdown of revenue and expenses for the renter so that they are able to approximate orchard profit/loss. Table 5a provides comparative numbers on the Renter’s Crop Share vs a Going Concern.

<i>Table 5a: Summary of Table 5</i>	<i>Crop Share – 50% Renter (per acre)</i>	<i>Going Concern Model (per acre)</i>	<i>Start Up Model (per acre)</i>
<i>Yield (lbs.)</i>	1325	2650	1355
<i>Revenue</i>	\$ 2650	\$ 5300	\$ 2710
<i>Production Expenses</i>	\$ 300	\$ 600	\$ 745
<i>Operating Expenses</i>	\$ 1154	\$ 770	\$ 670
<i>Labour Expenses</i>	\$ 243	\$ 485	\$ 498
<i>Total Variable Expenses</i>	\$ 1697	\$ 1855	\$ 1913
<i>Fixed Expenses</i>	\$ 102	\$ 1739	\$ 1741
<i>Contribution Margin</i>	\$ 954	\$ 3445	\$ 797
<i>Gross Margin</i>	\$ 1027	\$ 3592	\$ 1000

Comparing these numbers to a Going Concern Orchard, revenue and some expenses are decreased by the Owner’s share. The following are some points for consideration:

- Yield and Revenue are ½ of a Going Concern orchard to aid in covering rental cost of buildings and equipment
- Production expenses are split 50/50 between owner and renter
- Operating Expenses are higher due to the cost of renting Equipment and Buildings
- Labour Expenses are split 50/50 between owner and renter
- Total Variable Expenses are lower than a Going Concern orchard
- Fixed Expenses – Operating Interest is included. Equipment and Building depreciation is removed as the renter is paying the owner for using these assets.
- Contribution and Gross Margin decrease significantly (\$954 and \$1027 per acre respectively) due to the rental cost of equipment and buildings and 50/50 sharing of fruit

Model 6: Crop Share Model – Owner Renting Equipment to Renter

This model is used for those owners considering renting out their Going Concern orchard and the equipment. The Renter has no equipment or buildings and the owner will rent all equipment, buildings and cooler space to the Renter. Since the orchard has been a Going Concern, regular maintenance of the orchard is required. In this model, 50% of the revenue and cost will be to the account of the Owner.

Model Assumptions:

- Owner will rent the equipment, buildings and cooler/freezer space for storage
- Each orchardist will market fruit at their own discretion
- Rejuvenation of orchard is not required as is considered a “Going Concern”
- Regular Maintenance of Orchard is up to date with no pest issues noticeable
- Intensive pruning may occur on up to 10% of the orchard size on any given year; 10% pruning assumes a high level of orchard management and health, with average growth. However, pruning requirements may be higher depending on a range of factors.
- Pruning is calculated based on hours per acre. Based on information gathered it takes approximately 20 hours to prune 1 acre (\$15/hour wage)

Model Analysis: Table 6 provides data on a 50% crop share model for the owner. The spreadsheet shows the breakdown of revenue and expenses for the owner so that they are able to approximate orchard profit/loss. Table 6a provides comparative numbers on the Owner’s Crop Share vs a Going Concern:

<i>Table 6a: Summary of Table 6</i>	<i>Crop Share – 50% Owner (per acre)</i>	<i>Going Concern Model (per acre)</i>	<i>Start Up Model (per acre)</i>
<i>Yield (lbs.)</i>	1325	2650	1355
<i>Revenue</i>	\$ 3419	\$ 5300	\$ 2710
<i>Production Expenses</i>	\$ 300	\$ 600	\$ 745
<i>Operating Expenses</i>	\$ 385	\$ 770	\$ 670
<i>Labour Expenses</i>	\$ 243	\$ 485	\$ 498
<i>Total Variable Expenses</i>	\$ 928	\$ 1855	\$ 1913
<i>Fixed Expenses</i>	\$ 1640	\$ 1739	\$ 1741
<i>Contribution Margin</i>	\$ 2492	\$ 3445	\$ 797
<i>Gross Margin</i>	\$ 2565	\$ 3592	\$ 1000

Comparing these numbers to a Going Concern Orchard, revenue and some expenses are decreased by the renter’s share. The following are some points for consideration:

- Revenue is reduced by Renter's 50 % share. However, there is revenue recaptured from rental of buildings and equipment
- Total Variable Expenses (Production, Operating & Labour) are 1/2 of a Going Concern orchard's numbers
- Fixed Expenses – Operating Interest is shared 50/50 between owner and renter
- Fixed Expenses – Equipment and Building Depreciation is full amount as the orchard owner retains ownership of buildings and equipment
- Contribution and Gross Margin are decreased by 50% due to crop share; however, this is offset by rental income revenue from equipment and buildings

Model 7: Rejuvenated Orchard – Owner Operated

The Rejuvenated Orchard – Owner Operated model is used for those owners purchasing an old, overgrown or diseased orchard. The new owner will operate the orchard him/herself and will have all equipment and buildings necessary for running the orchard. Year 0 will be the year of rejuvenation and there will be no income for Year 1 and Year 2. Revenue and expenses are adjusted as production increases after rejuvenation. Each operation considering purchasing should complete a full due diligence as to the revenue and expense stream.

Model Assumptions:

- Owner will purchase the equipment, buildings and cooler/freezer either with the orchard or independently from the orchard
- Rejuvenation of orchard is required due to neglect or pests
- Rejuvenation occurs in the dormant season
- Rejuvenation is calculated on rental brush clearing equipment and labour hours for brush removal, straw shredding and burning
- Intensive pruning will occur starting in Year 2 for training bushes
- Intensive pruning may occur on up to 10% of the orchard size on any given year; 10% pruning assumes a high level of orchard management and health, with average growth. However, pruning requirements may be higher depending on a range of factors.
- Pruning is calculated based on hours per acre. Based on information gathered it takes approximately 20 hours to prune 1 acre (\$15/hour wage)

Model Analysis: Table 7 provides data on an owner operated orchard that has undergone rejuvenation. The spreadsheet shows the breakdown of yearly revenue and expenses for the owner so that they are able to approximate orchard profit/loss. Table 7a provides comparative numbers on an Owner Operated Rejuvenated Orchard vs a Going Concern and a Start Up:

<i>Table 7a: Summary of Table 7</i>	<i>Rejuvenated Orchard – Owner Operated (per acre)</i>	<i>Going Concern Model (per acre)</i>	<i>Start Up Model (per acre)</i>
<i>Yield (lbs.)</i>	2049	2650	1355
<i>Revenue</i>	\$ 4098	\$ 5300	\$ 2710
<i>Production Expenses</i>	\$ 610	\$ 600	\$ 745
<i>Operating Expenses</i>	\$ 722	\$ 770	\$ 670
<i>Labour Expenses</i>	\$ 466	\$ 485	\$ 498
<i>Total Variable Expenses</i>	\$ 1798	\$ 1855	\$ 1913
<i>Fixed Expenses</i>	\$ 1741	\$ 1739	\$ 1741
<i>Contribution Margin</i>	\$ 2300	\$ 3445	\$ 797
<i>Gross Margin</i>	\$ 2447	\$ 3592	\$ 1000

Comparing these numbers to a Going Concern Orchard, the effect of rejuvenating an orchard on orchard profitability can be seen. The following are some points for consideration:

- No revenue for Year 1 and 2
- A positive cumulative Contribution Margin will not be obtained until Year 4
- A positive cumulative Gross Margin will not be obtained until Year 4
- Cash Reserve and/or Operating lines or credit will be required for orchard operation until cumulative Contribution and Gross Margin becomes positive in Year 4
- Production Yield and Revenue decreased due to no yield in Year 1 and Year 2 plus accounting for a major adverse weather event that is likely to occur at least once in every 10 years
- Production, Operating and Labour Expenses remain relatively unchanged even though rejuvenation has been completed; some production and operating expenses, such as fertilizer, trucking, repairs and maintenance and fuel, are reduced until production returns to normal levels
- Total Variable Expenses drop slightly due to savings from production and operating expenses not required during the rejuvenation period
- Contribution and Gross Margin decrease significantly due to rejuvenation cost and decreased fruit production during this time

Model 8: Rejuvenated Orchard – Custom Operated

The Rejuvenated Orchard – Custom Operated model is used for those investors purchasing an old overgrown or diseased orchard with the intentions of having it custom operated. The new

owner will hire out the mowing, spraying, harvesting, rejuvenation and pruning; however, the orchard will have all equipment and buildings necessary for sorting and cooling the fruit. Year 0 will be the year of rejuvenation and there will be no income for Year 1 and 2. Revenue and expenses are adjusted as production increases after rejuvenation. Each investor considering purchasing an orchard requiring rejuvenation should complete a full due diligence as to the revenue and expense stream.

Model Assumptions:

- No revenue for Year 1 and 2
- Owner will purchase the orchard and buildings; but, will have all mowing, spraying, harvesting, pruning and rejuvenation completed by a custom operators.
- Rejuvenation of orchard is required due to neglect or pests
- Rejuvenation is calculated on rental brush clearing equipment and labour hours for brush removal, straw shredding and burning
- Intensive pruning will occur starting in Year 2 for training bushes
- Intensive pruning may occur on up to 10% of the orchard size on any given year; 10% pruning assumes a high level of orchard management and health, with average growth. However, pruning requirements may be higher depending on a range of factors.
- Pruning is calculated based on hours per acre. Based on information gathered it takes approximately 20 hours to prune 1 acre (\$15/hour wage)

Model Analysis: Table 8 provides data on an orchard that has undergone rejuvenation but has mowing, spraying, harvesting, pruning and rejuvenation completed through custom operators. The spreadsheet shows the breakdown of yearly revenue and expenses for the owner so that they are able to approximate orchard profit/loss. Table 8a provides comparative numbers on a Custom Operated Rejuvenation vs a Going Concern and comparing the cost of a Start Up Orchard:

<i>Table 8a: Summary of Table 8</i>	<i>Rejuvenated Orchard – Custom Operated (per acre)</i>	<i>Going Concern Model (per acre)</i>	<i>Start Up Model (per acre)</i>
<i>Yield (lbs.)</i>	2049	2650	1355
<i>Revenue</i>	\$ 4098	\$ 5300	\$ 2710
<i>Production Expenses</i>	\$ 1460	\$ 600	\$ 745
<i>Operating Expenses</i>	\$ 722	\$ 770	\$ 670
<i>Labour Expenses</i>	\$ 296	\$ 485	\$ 498
<i>Total Variable Expenses</i>	\$ 2478	\$ 1855	\$ 1913
<i>Fixed Expenses</i>	\$ 1026	\$ 1739	\$ 1741
<i>Contribution Margin</i>	\$ 1620	\$ 3445	\$ 797
<i>Gross Margin</i>	\$ 1659	\$ 3592	\$ 1000

Comparing these numbers to a Going Concern Orchard, the effect of rejuvenating an orchard on orchard profitability can be seen. The following are some points for consideration:

- No revenue for Year 1 and 2
- A positive cumulative Contribution Margin will not be obtained until Year 4
- A positive cumulative Gross Margin will not be obtained until Year 4
- Cash Reserve and/or Operating lines or credit will be required for orchard operations until margins turn positive in Year 4
- Production Yield and Revenue decreased due to no yield in Year 1 and Year 2 plus accounting for a major adverse weather event that is likely to occur at least once in every 10 years
- Production expenses increase dramatically due to most work being completed by custom operators
- Operating Expenses remain relatively unchanged
- Labour expenses decrease significantly due to custom operations
- Total Variable Expenses increase significantly due to the cost of rejuvenation and cost of custom work
- Contribution and Gross Margin decrease significantly due to rejuvenation cost, decreased fruit production but mostly due to the increased cost of custom work

Model 9: Rejuvenated Orchard – Operated by Hired Manager

This model is used for those investors purchasing an old overgrown or diseased orchard with the intentions of having a hired manager run the orchard on their behalf. The manager will oversee all aspects of the orchard such as: mowing, spraying, harvesting, rejuvenation, pruning, harvesting, sorting and selling of product. The orchard will have all equipment and buildings necessary for sorting and cooling the fruit. Year 0 will be the year of rejuvenation and there will be no income for Year 1 and Year 2. Revenue and expenses are adjusted as production increases after rejuvenation.

Model Assumptions:

- New owner will purchase the orchard and buildings and will purchase all equipment necessary to run the orchard
- Rejuvenation of orchard is required due to neglect or pests
- Intensive pruning will occur starting in Year 2 for training bushes
- Intensive pruning may occur on up to 10% of the orchard size on any given year; 10% pruning assumes a high level of orchard management and health, with average growth. However, pruning requirements may be higher depending on a range of factors.
- Pruning is calculated based on hours per acre. Based on information gathered it takes approximately 20 hours to prune 1 acre (\$15/hour wage)

- Rejuvenation is calculated on rental brush clearing equipment and labour hours for brush removal, straw shredding and burning

Model Analysis: Table 9 provides data on an orchard that has undergone rejuvenation with all major work being completed at the discretion of a hired manager. The spreadsheet shows the breakdown of yearly revenue and expenses for the owner so that they are able to approximate orchard profit/loss. Table 9a provides comparative numbers on Rejuvenated Orchard with a Hired Manager vs a Going Concern and comparing the cost of a Start Up Orchard:

Table 9a: Summary Data of Table 9

	<i>Rejuvenated Orchard – Hired Manager (per acre)</i>	<i>Going Concern Model (per acre)</i>	<i>Start Up Model (per acre)</i>
<i>Yield (lbs.)</i>	2049	2650	1355
<i>Revenue</i>	\$ 4098	\$ 5300	\$ 2710
<i>Production Expenses</i>	\$ 610	\$ 600	\$ 745
<i>Operating Expenses</i>	\$ 703	\$ 770	\$ 670
<i>Labour Expenses</i>	\$ 1493	\$ 485	\$ 498
<i>Total Variable Expenses</i>	\$ 2806	\$ 1855	\$ 1913
<i>Fixed Expenses</i>	\$ 1741	\$ 1739	\$ 1741
<i>Contribution Margin</i>	\$ 1292	\$ 3445	\$ 797
<i>Gross Margin</i>	\$ 1248	\$ 3592	\$ 1000

Comparing these numbers to a Going Concern Orchard, the effect of rejuvenating an orchard can be seen on orchard profitability. The following are some points for consideration:

- No revenue for Year 1 and Year 2 after rejuvenation
- A positive cumulative Contribution Margin will not be obtained until Year 5
- A positive cumulative Gross Margin will not be obtained until Year 5
- Cash Reserve and/or Operating lines or credit will be required for orchard operations until margins turn positive in Year 5
- Production Yield and Revenue decreased due to no yield in Year 1 and Year 2 plus accounting for a major adverse weather event that is likely to occur at least once in every 10 years
- Production and Operating Expenses remain relatively unchanged
- Labour expenses increase dramatically due to hiring a manager to conduct day to day activities
- Total Variable Expenses increase significantly due to the cost of a hired manager

- Contribution and Gross Margin decrease significantly due to rejuvenation cost, decreased fruit production but mostly due to the increased cost of a hired manager

Project Summary

Table 10 is a summary of the major revenue and expense totals from Tables 1-9. To determine if it makes economic sense to purchase an orchard, reviewing Table 10 will help. Each farm is different, these numbers are only intended to serve as a guideline; current numbers for the specific operation under consideration should be reviewed before any decision is made to purchase.

<i>Table 10: Summary Data of All Orchard Models</i>	<i>Start-Up</i>	<i>Going Concern</i>	<i>Going Concern Cooperative</i>	<i>Crop Share 2/3 Renter</i>	<i>Crop Share 1/3 Owner</i>	<i>Crop Share Rent Equip. Renter</i>	<i>Crop Share Rent Equip. Owner</i>	<i>Rejuvenated Owner Operated</i>	<i>Rejuvenated Custom Operated</i>	<i>Rejuvenated Hired Manager</i>
<i>Yield (lbs.)</i>	1355	2650	2650	1767	883	1325	1325	2049	2049	2049
<i>Revenue</i>	\$ 2710	\$ 5300	\$ 5300	\$ 3533	\$ 1767	\$ 2650	\$ 3419	\$ 4098	\$ 4098	\$ 4098
<i>Production Expenses</i>	\$ 745	\$ 600	\$ 600	\$ 400	\$ 200	\$ 300	\$ 300	\$ 610	\$ 1460	\$ 610
<i>Operating Expenses</i>	\$ 670	\$ 770	\$ 754	\$ 513	\$ 257	\$ 1154	\$ 385	\$ 722	\$ 722	\$ 703
<i>Labour Expenses</i>	\$ 498	\$ 485	\$ 485	\$ 323	\$ 162	\$ 243	\$ 243	\$ 466	\$ 296	\$ 1493
<i>Total Variable Expenses</i>	\$ 1913	\$ 1855	\$ 1839	\$ 1237	\$ 618	\$ 1697	\$ 928	\$ 1798	\$ 2478	\$ 2806
<i>Fixed Expenses</i>	\$ 1741	\$ 1739	\$ 1416	\$ 1673	\$ 1606	\$ 102	\$ 1640	\$ 1741	\$ 1026	\$ 1741
<i>Contribution Margin</i>	\$ 797	\$ 3445	\$ 3461	\$ 2297	\$ 1148	\$ 954	\$ 2492	\$ 2300	\$ 1620	\$ 1292
<i>Gross Margin</i>	\$ 1000	\$ 3592	\$ 3608	\$ 2395	\$ 1197	\$ 1027	\$ 2565	\$ 2447	\$ 1659	\$ 1248

Start Up: This model has the lowest Contribution and Gross Margin as it is a new orchard which requires special treatment while being planted and it takes those plants until Year 4 to start producing fruit. This serves as additional information when investors are looking at purchasing a Going Concern Orchard vs. a Rejuvenated Orchard. It allows the investor to determine if it is more economically beneficial to start a new orchard rather than purchasing an older orchard.

Going Concern – Cooperative: This model has the highest Contribution and Gross Margin as the harvester is being shared. This does come with some potential scheduling problems if fruit is ready for harvest at the same time in all three orchards. A further drawback is all an orchard's fruit will likely be harvested at the same time requiring enough sorting and storage capacity for the entire crop. If each orchard had their own equipment, harvesting could be completed in stages, maintaining fruit quality.

Crop Share Models: These alternative models were considered for those orchards who wish to expand but, may not have the capital available for expansion. These models also provide the ability for an orchard owner to exit the day to day operation of an orchard, without having to sell his/her entire orchard.

Crop Share (2/3 Renter: 1/3 Owner): If the Renter and Owner each have their own equipment and buildings, this could be a good option. By splitting both production and expenses, this provides flexibility for both renter and owner to monitor their expenses and also to look for markets to maximize their revenue.

Crop Share (Renter rents equipment from Owner): The Renter has a lower Contribution and Gross Margin; however, they do not have depreciation which increases the amount they will be able to put towards their equity.

The Owner may be very happy with this option as Contribution Margin and Gross Margin is higher than other options. However, the Owner has all the Depreciation and could be left with damaged equipment with no residual value after the rental period. The Owner should be careful to ensure that equipment is looked after. With 100% of the depreciation being the owner's, the amount of money to return to the owner's equity will be lower.

Rejuvenated Orchards: Rejuvenation is expensive and it is in the owner's best interest to prune on an annual basis and promptly manage all disease concerns to minimize the need for rejuvenation. If an orchard must be rejuvenated, an owner operated model is the best. Having all operations completed by custom operators or hiring a manager is expensive and has a significant effect on Contribution and Gross Margin – taking until Year 4 or 5, respectively to breakeven. Even an owner operator will take till Year 4 to breakeven. Cash reserves and/or operating line of credit will be required to ensure the orchard can operate until margins turn positive again.

With any of these models, it is important that the potential investor completes their due diligence to ensure success. Here are some points to consider:

- Review literature from Alberta Agriculture and Forestry and discuss options with their knowledgeable staff members
- Visit the farm – Look for orchard maintenance and disease presence to determine what expenses are needed to operate the orchard
- Review documentation – Review orchard financial/production records to determine yield, revenue and expenses. This will be a start to put numbers together to ensure that purchasing the orchard makes sense
- Plan – Put together a business plan which will aid in discussions with banks and/or partners
- Financial Institutions – Review with the bank to ensure that they are aware of orchard needs and will be able to work with the new owner to ensure financial success

Table 0: Start-Up Orchard

Orchard Independently Owned and Operated
\$/Acre

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	10 Year Avg.	10 Year Cumulative
Yield (lbs./ac)	0	0	0	0	575	1475	2700	900	2400	3000	2500	1,355	13,550
Price (\$/lb)	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00
Revenue	\$ -	\$ -	\$ -	\$ -	\$ 1,150	\$ 2,950	\$ 5,400	\$ 1,800	\$ 4,800	\$ 6,000	\$ 5,000	\$ 2,710	\$ 27,100
(+/- Production)	-	-	-	-	0%	257%	183%	33%	267%	125%	83%		
Total Revenue	\$ -	\$ -	\$ -	\$ -	\$ 1,150	\$ 2,950	\$ 5,400	\$ 1,800	\$ 4,800	\$ 6,000	\$ 5,000	\$ 2,710	\$ 27,100

Variable Expenses

Production Expenses

New Plant Material	\$ -	\$ 1,850	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 185	1,850
Herbicides/Insecticides/ Fungicides	\$ -	\$ 49	\$ 125	\$ 250	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 130	1,299
Fertilizer	\$ -	\$ -	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 68	675
Irrigation	\$ -	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	300
Packaging	\$ -	\$ -	\$ 25	\$ 30	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 29	285
Crop Insurance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Custom Work - Other	\$ 125	\$ 125	\$ 89	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 34	379
Pruning	\$ -	\$ -	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 270	2,700
Rejuvenation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Total Production Expenses	\$ 125	\$ 2,054	\$ 644	\$ 690	\$ 568	\$ 745	\$ 7,488						

Operating Expenses

Trucking	\$ -	\$ -	\$ -	\$ -	\$ 4	\$ 25	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 19	194
R&M Buildings	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	66
R&M Machinery	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	869
Fuel, Oil, & Lube	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	1,650
Small Tools	\$ 27	\$ 27	\$ 27	\$ 54	\$ 80	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 78	856
Land Taxes	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	396
Vehicle Registration	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	363
Building License & Insurance	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	297
Office Supplies	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	110
Utilities - Heating	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	110
Utilities - Power	\$ 82	\$ 82	\$ 82	\$ 82	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 99	1,090
Utilities - Phone	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	187
Professional Fees	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	286
Advertising	\$ -	\$ -	\$ -	\$ 19	\$ 19	\$ 57	\$ 76	\$ 76	\$ 76	\$ 76	\$ 76	\$ 43	475
Travel	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	77
Workers Benefits	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 8	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 8	83
Farmers Market/Marketing Fees	\$ -	\$ -	\$ -	\$ -	\$ 10	\$ 30	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 22	240
Total Operating Expenses	\$ 515	\$ 515	\$ 515	\$ 560	\$ 628	\$ 736	\$ 776	\$ 670	\$ 7,349				

Labour Expenses

Hired Manager Labour	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Paid Labour - Employees	\$ 34	\$ 34	\$ 45	\$ 45	\$ 45	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 92	1,013
Unpaid Labour - Owner	\$ 525	\$ 525	\$ 438	\$ 438	\$ 438	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350	\$ 406	4,463
Total Labour Expenses	\$ 559	\$ 559	\$ 483	\$ 483	\$ 483	\$ 485	\$ 498	\$ 5,475					

Total Variable Expenses \$ 1,199 \$ 3,127 \$ 1,641 \$ 1,732 \$ 1,679 \$ 1,789 \$ 1,829 \$ 1,829 \$ 1,829 \$ 1,829 \$ 1,829 \$ 1,829 \$ 1,913 \$ 20,312

Contribution Margin -\$ 1,199 -\$ 3,127 -\$ 1,641 -\$ 1,732 -\$ 529 \$ 1,161 \$ 3,571 -\$ 29 \$ 2,971 \$ 4,171 \$ 3,171 \$ 797 \$ 6,788

Cumulative Contribution Margin -\$ 1,199 -\$ 4,326 -\$ 5,967 -\$ 7,699 -\$ 8,228 -\$ 7,067 -\$ 3,496 -\$ 3,525 -\$ 554 \$ 3,617 \$ 6,788

Fixed Expenses

Operating Interest	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	2,233
Depreciation - Buildings	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	6,138
Depreciation - Machinery	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	10,780
Fixed Expenses	\$ 1,741	\$ 19,151											

Gross Margin -\$ 877 -\$ 2,805 -\$ 1,406 -\$ 1,498 -\$ 294 \$ 1,308 \$ 3,718 \$ 118 \$ 3,118 \$ 4,318 \$ 3,318 \$ 1,000 \$ 9,017

Cumulative Gross Margin -\$ 877 -\$ 3,682 -\$ 5,088 -\$ 6,586 -\$ 6,880 -\$ 5,573 -\$ 1,855 -\$ 1,737 \$ 1,381 \$ 5,699 \$ 9,017

Table 1: Alternative Orchard Models: Going Concern - Baseline

\$/Acre											10 Year	
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	10 Year Avg.	Cumulative
Yield (lbs./ac)	2750	2650	3050	3600	2950	2700	900	2400	3000	2500	2,650	26,500
Price (\$/lb)	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00
Revenue	\$ 5,500	\$ 5,300	\$ 6,100	\$ 7,200	\$ 5,900	\$ 5,400	\$ 1,800	\$ 4,800	\$ 6,000	\$ 5,000	\$ 5,300	\$ 53,000
(+/- Production)	-	96%	115%	118%	82%	92%	33%	267%	125%	83%		
Total Revenue	\$ 5,500	\$ 5,300	\$ 6,100	\$ 7,200	\$ 5,900	\$ 5,400	\$ 1,800	\$ 4,800	\$ 6,000	\$ 5,000	\$ 5,300	\$ 53,000

Variable Expenses

Production Expenses												
New Plants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Herbicides/Insecticides/ Fungicides	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 1,250
Fertilizer	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	750
Irrigation	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	300
Packaging	\$ 65	\$ 65	\$ 65	\$ 65	\$ 65	\$ 65	\$ 65	\$ 65	\$ 65	\$ 65	\$ 65	650
Crop Insurance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Custom Work - Other	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	50
Pruning	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	3,000
Rejuvenation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Total Production Expenses	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 600	\$ 6,000

Operating Expenses

Trucking	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 330
R&M Buildings	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	60
R&M Machinery	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	790
Fuel, Oil, & Lube	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	1,500
Small Tools	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	1,070
Land Taxes	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	360
Vehicle Registration	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	330
Building License & Insurance	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	270
Office Supplies	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	100
Utilities - Heating	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	100
Utilities - Power	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	1,090
Utilities - Phone	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	170
Professional Fees	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	260
Advertising	\$ 76	\$ 76	\$ 76	\$ 76	\$ 76	\$ 76	\$ 76	\$ 76	\$ 76	\$ 76	\$ 76	760
Travel	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	110
Workers Benefits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Farmers Market/Marketing Fees	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	400
Total Operating Expenses	\$ 770	\$ 770	\$ 770	\$ 770	\$ 770	\$ 770	\$ 770	\$ 770	\$ 770	\$ 770	\$ 770	\$ 7,700

Labour Expenses

Hired Manager Labour	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Paid Labour - Employees	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	1,350
Unpaid Labour - Owner	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350	3,500
Total Labour Expenses	\$ 485	\$ 485	\$ 485	\$ 485	\$ 485	\$ 485	\$ 485	\$ 485	\$ 485	\$ 485	\$ 485	4,850

Total Variable Expenses	\$ 1,855	\$ 1,855	\$ 1,855	\$ 1,855	\$ 1,855	\$ 1,855	\$ 1,855	\$ 1,855	\$ 1,855	\$ 1,855	\$ 1,855	\$ 18,550
-------------------------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	-----------

Contribution Margin	\$ 3,645	\$ 3,445	\$ 4,245	\$ 5,345	\$ 4,045	\$ 3,545	\$ 55	\$ 2,945	\$ 4,145	\$ 3,145	\$ 3,445	\$ 34,450
Cumulative Contribution Margin	\$ 3,645	\$ 7,090	\$ 11,335	\$ 16,680	\$ 20,725	\$ 24,270	\$ 24,215	\$ 27,160	\$ 31,305	\$ 34,450		

Fixed Expenses

Operating Interest	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	2,030
Depreciation - Buildings	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	5,580
Depreciation - Machinery	\$ 978	\$ 978	\$ 978	\$ 978	\$ 978	\$ 978	\$ 978	\$ 978	\$ 978	\$ 978	\$ 978	9,780
Fixed Expenses	\$ 1,739	\$ 1,739	\$ 1,739	\$ 1,739	\$ 1,739	\$ 1,739	\$ 1,739	\$ 1,739	\$ 1,739	\$ 1,739	\$ 1,739	17,390

Gross Margin	\$ 3,792	\$ 3,592	\$ 4,392	\$ 5,492	\$ 4,192	\$ 3,692	\$ 92	\$ 3,092	\$ 4,292	\$ 3,292	\$ 3,592	\$ 35,920
Cumulative Gross Margin	\$ 3,792	\$ 7,384	\$ 11,776	\$ 17,268	\$ 21,460	\$ 25,152	\$ 25,244	\$ 28,336	\$ 32,628	\$ 35,920		

Table 2: Alternative Orchard Models: Going Concern - Cooperative Model

											10 Year	
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	10 Year Avg.	Cumulative
Yield (lbs./ac)	2750	2650	3050	3600	2950	2700	900	2400	3000	2500	2,650	26,500
Price (\$/lb)	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00
Revenue	\$ 5,500	\$ 5,300	\$ 6,100	\$ 7,200	\$ 5,900	\$ 5,400	\$ 1,800	\$ 4,800	\$ 6,000	\$ 5,000	\$ 5,300	\$ 53,000
(+/- Production)	-	96%	115%	118%	82%	92%	33%	267%	125%	83%		
Total Revenue	\$ 5,500	\$ 5,300	\$ 6,100	\$ 7,200	\$ 5,900	\$ 5,400	\$ 1,800	\$ 4,800	\$ 6,000	\$ 5,000	\$ 5,300	\$ 53,000

Variable Expenses

Production Expenses

New Plants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Herbicides/Insecticides/ Fungicides	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 1,250
Fertilizer	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	750
Irrigation	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	300
Packaging	\$ 65	\$ 65	\$ 65	\$ 65	\$ 65	\$ 65	\$ 65	\$ 65	\$ 65	\$ 65	\$ 65	650
Crop Insurance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Custom Work - Other	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	50
Pruning	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	3,000
Renovation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Total Production Expenses	\$ 600	\$ 6,000										

Operating Expenses

Trucking	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	330
R&M Buildings	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	60
R&M Machinery	\$ 63	\$ 63	\$ 63	\$ 63	\$ 63	\$ 63	\$ 63	\$ 63	\$ 63	\$ 63	\$ 63	632
Fuel, Oil, & Lube	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	1,500
Small Tools	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	1,070
Land Taxes	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	360
Vehicle Registration	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	330
Building License & Insurance	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	270
Office Supplies	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	100
Utilities - Heating	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	100
Utilities - Power	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	1,090
Utilities - Phone	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	170
Professional Fees	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	260
Advertising	\$ 76	\$ 76	\$ 76	\$ 76	\$ 76	\$ 76	\$ 76	\$ 76	\$ 76	\$ 76	\$ 76	760
Travel	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	110
Workers Benefits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Farmers Market/Marketing Fees	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	400
Total Operating Expenses	\$ 754	\$ 7,542										

Labour Expenses

Hired Manager Labour	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Paid Labour - Employees	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135.00	1,350
UnPaid Labour - Owner	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350	3,500
Total Labour Expenses	\$ 485	\$ 4,850										

Total Variable Expenses \$ 1,839 \$ 1,839 \$ 1,839 \$ 1,839 \$ 1,839 \$ 1,839 \$ 1,839 \$ 1,839 \$ 1,839 \$ 1,839 \$ 1,839 \$ 1,839 \$ 18,392

Contribution Margin \$ 3,661 \$ 3,461 \$ 4,261 \$ 5,361 \$ 4,061 \$ 3,561 \$ 39 \$ 2,961 \$ 4,161 \$ 3,161 \$ 3,461 \$ 34,608

Cumulative Contribution Margin \$ 3,661 \$ 7,122 \$ 11,382 \$ 16,743 \$ 20,804 \$ 24,365 \$ 24,326 \$ 27,286 \$ 31,447 \$ 34,608

Fixed Expenses

Operating Interest	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	2,030
Depreciation - Buildings	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	5,580
Depreciation - Machinery	\$ 655	\$ 655	\$ 655	\$ 655	\$ 655	\$ 655	\$ 655	\$ 655	\$ 655	\$ 655	\$ 655	6,550
Fixed Expenses	\$ 1,416	\$ 14,160										

Gross Margin \$ 3,808 \$ 3,608 \$ 4,408 \$ 5,508 \$ 4,208 \$ 3,708 \$ 108 \$ 3,108 \$ 4,308 \$ 3,308 \$ 3,608 \$ 36,078

Cumulative Gross Margin \$ 3,808 \$ 7,416 \$ 11,823 \$ 17,331 \$ 21,539 \$ 25,247 \$ 25,355 \$ 28,462 \$ 32,770 \$ 36,078

Table 3: Alternative Orchard Models: Going Concern - Crop Share Model

Based on 2/3 for the Renter - Has own buildings and equipment

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	10 Year Avg.	10 Year Cumulative
Yield (lbs./ac)	1833	1767	2033	2400	1967	1800	600	1600	2000	1667	1,767	17,667
Price (\$/lb)	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00
Revenue	\$ 3,667	\$ 3,533	\$ 4,067	\$ 4,800	\$ 3,933	\$ 3,600	\$ 1,200	\$ 3,200	\$ 4,000	\$ 3,333	\$ 3,533	\$ 35,333
(+/- Production)	-	96%	115%	118%	82%	92%	33%	267%	125%	83%		
Total Revenue	\$ 3,667	\$ 3,533	\$ 4,067	\$ 4,800	\$ 3,933	\$ 3,600	\$ 1,200	\$ 3,200	\$ 4,000	\$ 3,333	\$ 3,533	\$ 35,333

Variable Expenses

Production Expenses

New Plants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Herbicides/Insecticides/ Fungicides	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 83	\$ 833
Fertilizer	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 500
Irrigation	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 200
Packaging	\$ 43	\$ 43	\$ 43	\$ 43	\$ 43	\$ 43	\$ 43	\$ 43	\$ 43	\$ 43	\$ 43	\$ 433
Crop Insurance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Custom Work - Other	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 33
Pruning	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 200	\$ 2,000
Renovation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Production Expenses	\$ 400	\$ 4,000										

Operating Expenses

Trucking	\$ 22	\$ 22	\$ 22	\$ 22	\$ 22	\$ 22	\$ 22	\$ 22	\$ 22	\$ 22	\$ 22	\$ 220
R&M Buildings	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 40
R&M Machinery	\$ 53	\$ 53	\$ 53	\$ 53	\$ 53	\$ 53	\$ 53	\$ 53	\$ 53	\$ 53	\$ 53	\$ 527
Fuel, Oil, & Lube	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 1,000
Small Tools	\$ 71	\$ 71	\$ 71	\$ 71	\$ 71	\$ 71	\$ 71	\$ 71	\$ 71	\$ 71	\$ 71	\$ 713
Land Taxes	\$ 24	\$ 24	\$ 24	\$ 24	\$ 24	\$ 24	\$ 24	\$ 24	\$ 24	\$ 24	\$ 24	\$ 240
Vehicle Registration	\$ 22	\$ 22	\$ 22	\$ 22	\$ 22	\$ 22	\$ 22	\$ 22	\$ 22	\$ 22	\$ 22	\$ 220
Building License & Insurance	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 180
Office Supplies	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 67
Utilities - Heating	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 67
Utilities - Power	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 73	\$ 727
Utilities - Phone	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 113
Professional Fees	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 173
Advertising	\$ 51	\$ 51	\$ 51	\$ 51	\$ 51	\$ 51	\$ 51	\$ 51	\$ 51	\$ 51	\$ 51	\$ 507
Travel	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 73
Workers Benefits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Farmers Market/Marketing Fees	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 267
Total Operating Expenses	\$ 513	\$ 5,133										

Labour Expenses

Hired Manager Labour	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Paid Labour - Employees	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90	\$ 90	\$ 900
UnPaid Labour - Owner	\$ 233	\$ 233	\$ 233	\$ 233	\$ 233	\$ 233	\$ 233	\$ 233	\$ 233	\$ 233	\$ 233	\$ 2,333
Total Labour Expenses	\$ 323	\$ 3,233										

Total Variable Expenses \$ 1,237 \$ 1,237 \$ 1,237 \$ 1,237 \$ 1,237 \$ 1,237 \$ 1,237 \$ 1,237 \$ 1,237 \$ 1,237 \$ 1,237 \$ 1,237 \$ 12,367

Contribution Margin	\$ 2,430	\$ 2,297	\$ 2,830	\$ 3,563	\$ 2,697	\$ 2,363	-\$ 37	\$ 1,963	\$ 2,763	\$ 2,097	\$ 2,297	\$ 22,967
Cumulative Contribution Margin	\$ 2,430	\$ 4,727	\$ 7,557	\$ 11,120	\$ 13,817	\$ 16,180	\$ 16,143	\$ 18,107	\$ 20,870	\$ 22,967		

Fixed Expenses

Operating Interest	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 1,353
Depreciation - Buildings	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 5,580
Depreciation - Machinery	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 9,800
Fixed Expenses	\$ 1,673	\$ 16,733										

Gross Margin \$ 2,528 \$ 2,395 \$ 2,928 \$ 3,661 \$ 2,795 \$ 2,461 \$ 61 \$ 2,061 \$ 2,861 \$ 2,195 \$ 2,395 \$ 23,947

Cumulative Gross Margin \$ 2,528 \$ 4,923 \$ 7,851 \$ 11,512 \$ 14,307 \$ 16,768 \$ 16,829 \$ 18,891 \$ 21,752 \$ 23,947

Table 4: Alternative Orchard Models: Going Concern - Crop Share Model

Based on 1/3 for the Owner

\$/Acre

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	10 Year Avg.	10 Year Cumulative
Yield (lbs./ac)	917	883	1017	1200	983	900	300	800	1000	833	883	8,833
Price (\$/lb)	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00
Revenue	\$ 1,833	\$ 1,767	\$ 2,033	\$ 2,400	\$ 1,967	\$ 1,800	\$ 600	\$ 1,600	\$ 2,000	\$ 1,667	\$ 1,767	\$ 17,667
(+/- Production)	-	96%	115%	118%	82%	92%	33%	267%	125%	83%		
Total Revenue	\$ 1,833	\$ 1,767	\$ 2,033	\$ 2,400	\$ 1,967	\$ 1,800	\$ 600	\$ 1,600	\$ 2,000	\$ 1,667	\$ 1,767	\$ 17,667

Variable Expenses

Production Expenses

New Plants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Herbicides/Insecticides/ Fungicides	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 42	\$ 417
Fertilizer	\$ 25	\$ 25	\$ 25	\$ 25	\$ 25	\$ 25	\$ 25	\$ 25	\$ 25	\$ 25	\$ 25	\$ 250
Irrigation	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 100
Packaging	\$ 22	\$ 22	\$ 22	\$ 22	\$ 22	\$ 22	\$ 22	\$ 22	\$ 22	\$ 22	\$ 22	\$ 217
Crop Insurance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Custom Work - Other	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 17
Pruning	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 100	\$ 1,000
Renovation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Production Expenses	\$ 200	\$ 2,000										

Operating Expenses

Trucking	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 110
R&M Buildings	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 2	\$ 20
R&M Machinery	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 263
Fuel, Oil, & Lube	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 50	\$ 500
Small Tools	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 357
Land Taxes	\$ 12	\$ 12	\$ 12	\$ 12	\$ 12	\$ 12	\$ 12	\$ 12	\$ 12	\$ 12	\$ 12	\$ 120
Vehicle Registration	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 11	\$ 110
Building License & Insurance	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 90
Office Supplies	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 33
Utilities - Heating	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 33
Utilities - Power	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 363
Utilities - Phone	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 57
Professional Fees	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 87
Advertising	\$ 25	\$ 25	\$ 25	\$ 25	\$ 25	\$ 25	\$ 25	\$ 25	\$ 25	\$ 25	\$ 25	\$ 253
Travel	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 4	\$ 37
Workers Benefits	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Farmers Market/Marketing Fees	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 133
Total Operating Expenses	\$ 257	\$ 2,567										

Labour Expenses

Hired Manager Labour	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Paid Labour - Employees	\$ 45	\$ 45	\$ 45	\$ 45	\$ 45	\$ 45	\$ 45	\$ 45	\$ 45	\$ 45	\$ 45	\$ 450
UnPaid Labour - Owner	\$ 117	\$ 117	\$ 117	\$ 117	\$ 117	\$ 117	\$ 117	\$ 117	\$ 117	\$ 117	\$ 117	\$ 1,167
Total Labour Expenses	\$ 162	\$ 1,617										

Total Variable Expenses	\$ 618	\$ 618	\$ 618	\$ 6,183								
Contribution Margin	\$ 1,215	\$ 1,148	\$ 1,415	\$ 1,782	\$ 1,348	\$ 1,182	\$ 18	\$ 982	\$ 1,382	\$ 1,048	\$ 1,148	\$ 11,483
Cumulative Contribution Margin	\$ 1,215	\$ 2,363	\$ 3,778	\$ 5,560	\$ 6,908	\$ 8,090	\$ 8,072	\$ 9,053	\$ 10,435	\$ 11,483		

Fixed Expenses

Operating Interest	\$ 68	\$ 68	\$ 68	\$ 68	\$ 68	\$ 68	\$ 68	\$ 68	\$ 68	\$ 68	\$ 68	\$ 677
Depreciation - Buildings	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 5,580
Depreciation - Machinery	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 9,800
Fixed Expenses	\$ 1,606	\$ 16,057										

Gross Margin	\$ 1,264	\$ 1,197	\$ 1,464	\$ 1,831	\$ 1,397	\$ 1,231	\$ 31	\$ 1,031	\$ 1,431	\$ 1,097	\$ 1,197	\$ 11,973
Cumulative Gross Margin	\$ 1,264	\$ 2,461	\$ 3,925	\$ 5,756	\$ 7,153	\$ 8,384	\$ 8,415	\$ 9,445	\$ 10,876	\$ 11,973		

Table 5: Alternative Orchard Models: Going Concern - Crop Share Model

Renter - Renting buildings and equipment from Owner

\$/Acre

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	10 Year Avg.	10 Year Cumulative
Yield (lbs./ac)	1375	1325	1525	1800	1475	1350	450	1200	1500	1250	1,325	13,250
Price (\$/lb)	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00
Revenue	\$ 2,750	\$ 2,650	\$ 3,050	\$ 3,600	\$ 2,950	\$ 2,700	\$ 900	\$ 2,400	\$ 3,000	\$ 2,500	\$ 2,650	\$ 26,500
(+/- Production)	-	96%	115%	118%	82%	92%	33%	267%	125%	83%		
Total Revenue	\$ 2,750	\$ 2,650	\$ 3,050	\$ 3,600	\$ 2,950	\$ 2,700	\$ 900	\$ 2,400	\$ 3,000	\$ 2,500	\$ 2,650	\$ 26,500

Variable Expenses

Production Expenses

New Plants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Herbicides/Insecticides/ Fungicides	\$ 63	\$ 63	\$ 63	\$ 63	\$ 63	\$ 63	\$ 63	\$ 63	\$ 63	\$ 63	\$ 63	\$ 625
Fertilizer	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 375
Irrigation	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 150
Packaging	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 325
Crop Insurance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Custom Work - Other	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 25
Pruning	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 1,500
Rejuvenation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Production Expenses	\$ 300	\$ 3,000										

Operating Expenses

Trucking	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 165
R&M Buildings	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 30
R&M Machinery	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 395
Fuel, Oil, & Lube	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 750
Small Tools	\$ 54	\$ 54	\$ 54	\$ 54	\$ 54	\$ 54	\$ 54	\$ 54	\$ 54	\$ 54	\$ 54	\$ 535
Land Taxes	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 180
Vehicle Registration	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 165
Building License & Insurance	\$ 14	\$ 14	\$ 14	\$ 14	\$ 14	\$ 14	\$ 14	\$ 14	\$ 14	\$ 14	\$ 14	\$ 135
Office Supplies	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 50
Utilities - Heating	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 50
Utilities - Power	\$ 55	\$ 55	\$ 55	\$ 55	\$ 55	\$ 55	\$ 55	\$ 55	\$ 55	\$ 55	\$ 55	\$ 545
Utilities - Phone	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 85
Professional Fees	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 130
Advertising	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 380
Travel	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 55
Rental of Buildings and Equipment	\$ 769	\$ 769	\$ 769	\$ 769	\$ 769	\$ 769	\$ 769	\$ 769	\$ 769	\$ 769	\$ 769	\$ 7,690
Farmers Market/Marketing Fees	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 200
Total Operating Expenses	\$ 1,154	\$ 11,540										

Labour Expenses

Hired Manager Labour	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Paid Labour - Employees	\$ 68	\$ 68	\$ 68	\$ 68	\$ 68	\$ 68	\$ 68	\$ 68	\$ 68	\$ 68	\$ 68	\$ 675
Unpaid Labour - Owner	\$ 175	\$ 175	\$ 175	\$ 175	\$ 175	\$ 175	\$ 175	\$ 175	\$ 175	\$ 175	\$ 175	\$ 1,750
Total Labour Expenses	\$ 243	\$ 2,425										

Total Variable Expenses \$ 1,697 \$ 1,697 \$ 1,697 \$ 1,697 \$ 1,697 \$ 1,697 \$ 1,697 \$ 1,697 \$ 1,697 \$ 1,697 \$ 1,697 \$ 1,697 \$ 16,965

Contribution Margin	\$ 1,054	\$ 954	\$ 1,354	\$ 1,904	\$ 1,254	\$ 1,004	\$ 797	\$ 704	\$ 1,304	\$ 804	\$ 954	\$ 9,535
Cumulative Contribution Margin	\$ 1,054	\$ 2,007	\$ 3,361	\$ 5,264	\$ 6,518	\$ 7,521	\$ 6,725	\$ 7,428	\$ 8,732	\$ 9,535		

Fixed Expenses

Operating Interest	\$ 102	\$ 102	\$ 102	\$ 102	\$ 102	\$ 102	\$ 102	\$ 102	\$ 102	\$ 102	\$ 102	\$ 1,015
Depreciation - Buildings	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Depreciation - Machinery	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Fixed Expenses	\$ 102	\$ 1,015										

Gross Margin \$ 1,127 \$ 1,027 \$ 1,427 \$ 1,977 \$ 1,327 \$ 1,077 \$ 723 \$ 777 \$ 1,377 \$ 877 \$ 1,027 \$ 10,270

Cumulative Gross Margin \$ 1,127 \$ 2,154 \$ 3,581 \$ 5,558 \$ 6,885 \$ 7,962 \$ 7,239 \$ 8,016 \$ 9,393 \$ 10,270

Table 6: Alternative Orchard Models: Going Concern - Crop Share Model

Owner - Renting buildings to Renter
\$/Acre

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	10 Year Avg.	10 Year Cumulative
Yield (lbs./ac)	1375	1325	1525	1800	1475	1350	450	1200	1500	1250	1,325	13,250
Price (\$/lb)	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00
Crop Revenue	\$ 2,750	\$ 2,650	\$ 3,050	\$ 3,600	\$ 2,950	\$ 2,700	\$ 900	\$ 2,400	\$ 3,000	\$ 2,500	\$ 2,650	\$ 26,500
Equipment & Building Rental	\$ 769	\$ 769	\$ 769	\$ 769	\$ 769	\$ 769	\$ 769	\$ 769	\$ 769	\$ 769	\$ 769	\$ 7,690
(+/- Production)	-	96%	115%	118%	82%	92%	33%	267%	125%	83%		
Total Revenue	\$ 3,519	\$ 3,419	\$ 3,819	\$ 4,369	\$ 3,719	\$ 3,469	\$ 1,669	\$ 3,169	\$ 3,769	\$ 3,269	\$ 3,419	\$ 34,190

Variable Expenses

Production Expenses

New Plants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Herbicides/Insecticides/ Fungicides	\$ 63	\$ 63	\$ 63	\$ 63	\$ 63	\$ 63	\$ 63	\$ 63	\$ 63	\$ 63	\$ 63	\$ 625
Fertilizer	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 375
Irrigation	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 15	\$ 150
Packaging	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 325
Crop Insurance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Custom Work - Other	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 25
Pruning	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 1,500
Renovation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Total Production Expenses	\$ 300	\$ 3,000										

Operating Expenses

Trucking	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 165
R&M Buildings	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 3	\$ 30
R&M Machinery	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 395
Fuel, Oil, & Lube	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 750
Small Tools	\$ 54	\$ 54	\$ 54	\$ 54	\$ 54	\$ 54	\$ 54	\$ 54	\$ 54	\$ 54	\$ 54	\$ 535
Land Taxes	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 18	\$ 180
Vehicle Registration	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 165
Building License & Insurance	\$ 14	\$ 14	\$ 14	\$ 14	\$ 14	\$ 14	\$ 14	\$ 14	\$ 14	\$ 14	\$ 14	\$ 135
Office Supplies	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 50
Utilities - Heating	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 50
Utilities - Power	\$ 55	\$ 55	\$ 55	\$ 55	\$ 55	\$ 55	\$ 55	\$ 55	\$ 55	\$ 55	\$ 55	\$ 545
Utilities - Phone	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 9	\$ 85
Professional Fees	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 13	\$ 130
Advertising	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 38	\$ 380
Travel	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 55
Rental of Buildings and Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Farmers Market/Marketing Fees	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 20	\$ 200
Total Operating Expenses	\$ 385	\$ 3,850										

Labour Expenses

Hired Manager Labour	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Paid Labour - Employees	\$ 68	\$ 68	\$ 68	\$ 68	\$ 68	\$ 68	\$ 68	\$ 68	\$ 68	\$ 68	\$ 68	\$ 675
Unpaid Labour - Owner	\$ 175	\$ 175	\$ 175	\$ 175	\$ 175	\$ 175	\$ 175	\$ 175	\$ 175	\$ 175	\$ 175	\$ 1,750
Total Labour Expenses	\$ 243	\$ 2,425										

Total Variable Expenses \$ 928 \$ 928 \$ 928 \$ 928 \$ 928 \$ 928 \$ 928 \$ 928 \$ 928 \$ 928 \$ 928 \$ 928 \$ 9,275

Contribution Margin \$ 2,592 \$ 2,492 \$ 2,892 \$ 3,442 \$ 2,792 \$ 2,542 \$ 742 \$ 2,242 \$ 2,842 \$ 2,342 \$ 2,492 \$ 24,915

Cumulative Contribution Margin \$ 2,592 \$ 5,083 \$ 7,975 \$ 11,416 \$ 14,208 \$ 16,749 \$ 17,491 \$ 19,732 \$ 22,574 \$ 24,915

Fixed Expenses

Operating Interest	\$ 102	\$ 102	\$ 102	\$ 102	\$ 102	\$ 102	\$ 102	\$ 102	\$ 102	\$ 102	\$ 102	\$ 1,015
Depreciation - Buildings	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 5,580
Depreciation - Machinery	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 9,800
Fixed Expenses	\$ 1,640	\$ 16,395										

Gross Margin \$ 2,665 \$ 2,565 \$ 2,965 \$ 3,515 \$ 2,865 \$ 2,615 \$ 815 \$ 2,315 \$ 2,915 \$ 2,415 \$ 2,565 \$ 25,650

Cumulative Gross Margin \$ 2,665 \$ 5,230 \$ 8,195 \$ 11,710 \$ 14,575 \$ 17,190 \$ 18,005 \$ 20,320 \$ 23,235 \$ 25,650

Table 7: Alternative Orchard Models: Rejuvenated Orchard

Orchard Independently Owned and Operated
\$/Acre

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	10 Year Avg.	10 Year Cumulative
Yield (lbs./ac)	0	0	0	2440	3600	2950	2700	900	2400	3000	2500	2,049	20,490
Price (\$/lb)	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00
Revenue	\$ -	\$ -	\$ -	\$ 4,880	\$ 7,200	\$ 5,900	\$ 5,400	\$ 1,800	\$ 4,800	\$ 6,000	\$ 5,000	\$ 4,098	\$ 40,980
(+/- Production)	-	-	-	-	148%	82%	92%	33%	267%	125%	83%		
Total Revenue	\$ -	\$ -	\$ -	\$ 4,880	\$ 7,200	\$ 5,900	\$ 5,400	\$ 1,800	\$ 4,800	\$ 6,000	\$ 5,000	\$ 4,098	\$ 40,980

Variable Expenses

Production Expenses

New Plants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Herbicides/Insecticides	\$ -	\$ 31	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 116
Fertilizer	\$ -	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 750
Irrigation	\$ -	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 300
Packaging	\$ -	\$ -	\$ 25	\$ 30	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 29
Crop Insurance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Custom Work - Other	\$ -	\$ 3	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 48
Pruning	\$ -	\$ -	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 270
Rejuvenation	\$ 950	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 86
Total Production Expenses	\$ 950	\$ 139	\$ 560	\$ 565	\$ 568	\$ 6,190							

Operating Expenses

Trucking	\$ -	\$ -	\$ 8	\$ 11	\$ 17	\$ 25	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 23
R&M Buildings	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 66
R&M Machinery	\$ 59	\$ 59	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 830
Fuel, Oil, & Lube	\$ 113	\$ 75	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 1,538
Small Tools	\$ 54	\$ 54	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 1,070
Land Taxes	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 396
Vehicle Registration	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 363
Building License & Insurance	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 297
Office Supplies	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 110
Utilities - Heating	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 110
Utilities - Power	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 1,199
Utilities - Phone	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 187
Professional Fees	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 286
Advertising	\$ -	\$ -	\$ 19	\$ 38	\$ 57	\$ 76	\$ 76	\$ 76	\$ 76	\$ 76	\$ 76	\$ 76	\$ 570
Travel	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 77
Workers Benefits	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 110
Farmers Market/Marketing Fees	\$ -	\$ -	\$ 10	\$ 20	\$ 30	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 300
Total Operating Expenses	\$ 517	\$ 479	\$ 664	\$ 696	\$ 731	\$ 768	\$ 776	\$ 7,734					

Labour Expenses

Hired Manager Labour	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Paid Labour - Employees	\$ 34	\$ 45	\$ 68	\$ 101	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 135	\$ 1,193
Unpaid Labour - Owner	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350	\$ 350	\$ 3,850
Total Labour Expenses	\$ 384	\$ 395	\$ 418	\$ 451	\$ 485	\$ 5,043							

Total Variable Expenses	\$ 1,850	\$ 1,013	\$ 1,642	\$ 1,712	\$ 1,784	\$ 1,821	\$ 1,829	\$ 1,829	\$ 17,988				
Contribution Margin	-\$ 1,850	-\$ 1,013	-\$ 1,642	\$ 3,168	\$ 5,417	\$ 4,079	\$ 3,571	-\$ 29	\$ 2,971	\$ 4,171	\$ 3,171	\$ 2,300	\$ 22,014
Cumulative Contribution Margin	-\$ 1,850	-\$ 2,863	-\$ 4,505	-\$ 1,337	\$ 4,080	\$ 8,159	\$ 11,730	\$ 11,701	\$ 14,672	\$ 18,843	\$ 22,014		

Fixed Expenses

Operating Interest	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 2,233
Depreciation - Buildings	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 6,138
Depreciation - Machinery	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 10,780
Fixed Expenses	\$ 1,741	\$ 19,151											

Gross Margin	-\$ 1,703	-\$ 866	-\$ 1,495	\$ 3,315	\$ 5,564	\$ 4,226	\$ 3,718	\$ 118	\$ 3,118	\$ 4,318	\$ 3,318	\$ 2,447	\$ 23,631
Cumulative Gross Margin	-\$ 1,703	-\$ 2,569	-\$ 4,064	-\$ 749	\$ 4,815	\$ 9,041	\$ 12,759	\$ 12,877	\$ 15,995	\$ 20,313	\$ 23,631		

Table 8: Alternative Orchard Models: Rejuvenated Orchard

Orchard Managed by Owner using Custom Operators

\$/Acre

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	10 Year Avg.	10 Year Cumulative
Yield (lbs./ac)	0	0	0	2440	3600	2950	2700	900	2400	3000	2500	2,049	20,490
Price (\$/lb)	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00
Revenue	\$ -	\$ -	\$ -	\$ 4,880	\$ 7,200	\$ 5,900	\$ 5,400	\$ 1,800	\$ 4,800	\$ 6,000	\$ 5,000	\$ 4,098	\$ 40,980
(+/- Production)	-	-	-	-	148%	82%	92%	33%	267%	125%	83%		
Total Revenue	\$ -	\$ -	\$ -	\$ 4,880	\$ 7,200	\$ 5,900	\$ 5,400	\$ 1,800	\$ 4,800	\$ 6,000	\$ 5,000	\$ 4,098	\$ 40,980

Variable Expenses

Production Expenses

New Plants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Herbicides/Insecticides/ Fungicides	\$ -	\$ 31	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 116	1,156
Fertilizer	\$ -	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	750
Irrigation	\$ -	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	300
Packaging	\$ -	\$ -	\$ 25	\$ 30	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 29	285
Crop Insurance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Custom Work - Spraying	\$ -	\$ 16	\$ 49	\$ 49	\$ 49	\$ 49	\$ 49	\$ 49	\$ 49	\$ 49	\$ 49	\$ 46	457
Custom Work - Mowing	\$ 146	\$ 146	\$ 146	\$ 146	\$ 146	\$ 146	\$ 146	\$ 146	\$ 146	\$ 146	\$ 146	\$ 146	1,609
Custom Work - Harvesting	\$ -	\$ -	\$ 338	\$ 675	\$ 675	\$ 675	\$ 675	\$ 675	\$ 675	\$ 675	\$ 675	\$ 574	5,738
Custom Work - Pruning	\$ -	\$ -	\$ 375	\$ 375	\$ 375	\$ 375	\$ 375	\$ 375	\$ 375	\$ 375	\$ 375	\$ 338	3,375
Custom Work - Rejuvenation	\$ 1,188	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 108	1,188
Total Production Expenses	\$ 1,334	\$ 299	\$ 1,163	\$ 1,505	\$ 1,508	\$ 1,460	\$ 14,858						

Operating Expenses

Trucking	\$ -	\$ -	\$ 8	\$ 11	\$ 17	\$ 25	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 23	226
R&M Buildings	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	66
R&M Machinery	\$ 59	\$ 59	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 77	830
Fuel, Oil, & Lube	\$ 113	\$ 75	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 143	1,538
Small Tools	\$ 54	\$ 54	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 102	1,070
Land Taxes	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	396
Vehicle Registration	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	363
Building License & Insurance	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	297
Office Supplies	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	110
Utilities - Heating	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	110
Utilities - Power	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	1,199
Utilities - Phone	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	187
Professional Fees	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	286
Advertising	\$ -	\$ -	\$ 19	\$ 38	\$ 57	\$ 76	\$ 76	\$ 76	\$ 76	\$ 76	\$ 76	\$ 57	570
Travel	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	77
Workers Benefits	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	110
Farmers Market/Marketing Fees	\$ -	\$ -	\$ 10	\$ 20	\$ 30	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 30	300
Total Operating Expenses	\$ 517	\$ 479	\$ 664	\$ 696	\$ 731	\$ 768	\$ 776	\$ 722	\$ 7,734				

Labour Expenses

Hired Manager Labour	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Paid Labour - Employees	\$ 34	\$ 34	\$ 34	\$ 34	\$ 34	\$ 34	\$ 34	\$ 34	\$ 34	\$ 34	\$ 34	\$ 34	371
Unpaid Labour - Owner	\$ 263	\$ 263	\$ 263	\$ 263	\$ 263	\$ 263	\$ 263	\$ 263	\$ 263	\$ 263	\$ 263	\$ 263	2,888
Total Labour Expenses	\$ 297	\$ 3,259											

Total Variable Expenses	\$ 2,147	\$ 1,074	\$ 2,123	\$ 2,497	\$ 2,535	\$ 2,572	\$ 2,581	\$ 2,581	\$ 2,581	\$ 2,581	\$ 2,581	\$ 2,478	\$ 25,850
Contribution Margin	-\$ 2,147	-\$ 1,074	-\$ 2,123	\$ 2,383	\$ 4,665	\$ 3,328	\$ 2,820	-\$ 781	\$ 2,220	\$ 3,420	\$ 2,420	\$ 1,620	\$ 15,130
Cumulative Contribution Margin	-\$ 2,147	-\$ 3,220	-\$ 5,343	-\$ 2,961	\$ 1,704	\$ 5,032	\$ 7,852	\$ 7,071	\$ 9,291	\$ 12,710	\$ 15,130		

Fixed Expenses

Operating Interest	\$ 223	\$ 223	\$ 223	\$ 223	\$ 223	\$ 223	\$ 223	\$ 223	\$ 223	\$ 223	\$ 223	\$ 223	2,456
Depreciation - Buildings	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	6,138
Depreciation - Machinery	\$ 245	\$ 245	\$ 245	\$ 245	\$ 245	\$ 245	\$ 245	\$ 245	\$ 245	\$ 245	\$ 245	\$ 245	2,695
Fixed Expenses	\$ 1,026	\$ 1,026	\$ 1,026	\$ 1,026	\$ 1,026	\$ 1,026	\$ 1,026	\$ 1,026	\$ 1,026	\$ 1,026	\$ 1,026	\$ 1,026	\$ 11,289
Gross Margin	-\$ 2,107	-\$ 1,035	-\$ 2,084	\$ 2,422	\$ 4,704	\$ 3,367	\$ 2,859	-\$ 741	\$ 2,259	\$ 3,459	\$ 2,459	\$ 1,659	\$ 15,561
Cumulative Gross Margin	-\$ 2,107	-\$ 3,142	-\$ 5,226	-\$ 2,804	\$ 1,900	\$ 5,267	\$ 8,126	\$ 7,385	\$ 9,643	\$ 13,102	\$ 15,561		

Table 9: Alternative Orchard Models: Rejuvenated Orchard

Orchard operated by a Hired Manager

\$/Acre

	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	10 Year Avg.	10 Year Cumulative
Yield (lbs./ac)	0	0	0	2440	3600	2950	2700	900	2400	3000	2500	2,049	20,490
Price (\$/lb)	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	\$ 2.00	2	\$ 2.00
Revenue	\$ -	\$ -	\$ -	\$ 4,880	\$ 7,200	\$ 5,900	\$ 5,400	\$ 1,800	\$ 4,800	\$ 6,000	\$ 5,000	4,098	\$ 40,980
(+/- Production)	-	-	-	-	148%	82%	92%	33%	267%	125%	83%		
Total Revenue	\$ -	\$ -	\$ -	\$ 4,880	\$ 7,200	\$ 5,900	\$ 5,400	\$ 1,800	\$ 4,800	\$ 6,000	\$ 5,000	\$ 4,098	\$ 40,980

Variable Expenses

Production Expenses

New Plants	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Herbicides/Insecticides/ Fungicides	\$ -	\$ 31	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 125	\$ 116	1,156
Fertilizer	\$ -	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	\$ 75	750
Irrigation	\$ -	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	\$ 30	300
Packaging	\$ -	\$ -	\$ 25	\$ 30	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 29	285
Crop Insurance	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-
Custom Work - Other	\$ 3	\$ 3	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	\$ 5	51
Pruning	\$ -	\$ -	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 300	\$ 270	2,700
Rejuvenation	\$ 950	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 86	950
Total Production Expenses	\$ 953	\$ 139	\$ 560	\$ 565	\$ 568	\$ 610	\$ 6,193						

Operating Expenses

Trucking	\$ -	\$ -	\$ 8	\$ 11	\$ 17	\$ 25	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 21	226
R&M Buildings	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	\$ 6	66
R&M Machinery	\$ 59	\$ 59	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 79	\$ 75	830
Fuel, Oil, & Lube	\$ 113	\$ 75	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 150	\$ 140	1,538
Small Tools	\$ 54	\$ 54	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 107	\$ 97	1,070
Land Taxes	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	\$ 36	396
Vehicle Registration	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	\$ 33	363
Building License & Insurance	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	\$ 27	297
Office Supplies	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	110
Utilities - Heating	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	110
Utilities - Power	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	\$ 109	1,199
Utilities - Phone	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	\$ 17	187
Professional Fees	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	\$ 26	286
Advertising	\$ -	\$ -	\$ 19	\$ 38	\$ 57	\$ 76	\$ 76	\$ 76	\$ 76	\$ 76	\$ 76	\$ 52	570
Travel	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	\$ 7	77
Workers Benefits	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	\$ 10	110
Farmers Market/Marketing Fees	\$ -	\$ -	\$ 10	\$ 20	\$ 30	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 40	\$ 27	300
Total Operating Expenses	\$ 517	\$ 479	\$ 664	\$ 696	\$ 731	\$ 768	\$ 776	\$ 703	\$ 7,734				

Labour Expenses

Hired Manager Labour	\$ 1,250	\$ 1,250	\$ 1,250	\$ 1,250	\$ 1,250	\$ 1,250	\$ 1,250	\$ 1,250	\$ 1,250	\$ 1,250	\$ 1,250	\$ 1,250	13,750
Paid Labour - Employees	\$ 34	\$ 34	\$ 68	\$ 90	\$ 90	\$ 101	\$ 101	\$ 101	\$ 101	\$ 101	\$ 101	\$ 84	923
Unpaid Labour - Owner	\$ 88	\$ 88	\$ 175	\$ 175	\$ 175	\$ 175	\$ 175	\$ 175	\$ 175	\$ 175	\$ 175	\$ 159	1,750
Total Labour Expenses	\$ 1,371	\$ 1,371	\$ 1,493	\$ 1,515	\$ 1,515	\$ 1,526	\$ 1,493	\$ 16,423					

Total Variable Expenses	\$ 2,841	\$ 1,989	\$ 2,717	\$ 2,776	\$ 2,814	\$ 2,862	\$ 2,870	\$ 2,870	\$ 2,870	\$ 2,870	\$ 2,870	\$ 2,806	\$ 30,349
Contribution Margin	-\$ 2,841	-\$ 1,989	-\$ 2,717	\$ 2,104	\$ 4,387	\$ 3,038	\$ 2,530	-\$ 1,070	\$ 1,930	\$ 3,130	\$ 2,130	\$ 1,292	\$ 10,631
Cumulative Contribution Margin	-\$ 2,841	-\$ 4,830	-\$ 7,547	-\$ 5,443	-\$ 1,056	\$ 1,982	\$ 4,512	\$ 3,441	\$ 5,371	\$ 8,501	\$ 10,631		

Fixed Expenses

Operating Interest	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	\$ 203	2,233
Depreciation - Buildings	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	\$ 558	6,138
Depreciation - Machinery	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	\$ 980	10,780
Fixed Expenses	\$ 1,741	\$ 1,741	\$ 1,741	\$ 1,741	\$ 1,741	\$ 1,741	\$ 1,741	\$ 1,741	\$ 19,151				
Gross Margin	-\$ 2,957	-\$ 2,105	-\$ 2,745	\$ 2,076	\$ 4,359	\$ 3,010	\$ 2,502	-\$ 1,098	\$ 1,902	\$ 3,102	\$ 2,102	\$ 1,248	\$ 10,148
Cumulative Gross Margin	-\$ 2,957	-\$ 5,061	-\$ 7,806	-\$ 5,730	-\$ 1,371	\$ 1,639	\$ 4,141	\$ 3,042	\$ 4,944	\$ 8,046	\$ 10,148		