



***Inventory and Retail Sales Review
Fruit Experiment Station***

William H. Darr College of Agriculture

October 4, 2018

Office of Internal Audit and Compliance



Missouri State
U N I V E R S I T Y

DATE: October 4, 2018

TO: Dr. Ronald P. Del Vecchio, Dean of College of Agriculture

CC: Dr. Frank Einhellig, Chancellor of Fruit Experiment Station and Provost
Stephen C. Foucart, Chief Financial Officer
Rachael Dockery, General Counsel
Clifton M. Smart III, University President

FROM: Donna Christian, Director of Internal Audit and Compliance
Natalie B. McNish, Senior Internal Auditor

**Inventory and Retail Sales Review
Fruit Experiment Station
William H. Darr College of Agriculture**

BACKGROUND

The Fruit Experiment Station is a 190-acre campus located in Mountain Grove, MO. The campus includes several acres of research and demonstration plantings, which produce various fruits. Harvested fruits are used for graduate research, produced into wines and spirits at the Mountain Grove Winery and Distillery, preserved as fruit product by outside vendors, or sold fresh. All products produced are sold at the campus, and wine, spirits, and fruit products are also sold on-line through a storefront. In addition, wines and spirits are also sold wholesale to the Brown Derby International Wine Center and HyVee located in Springfield, MO. During the fiscal year ended June 30, 2018, the campus sold \$23,373 in wine and spirit products, and \$29,611 in fresh and processed fruit products.

OBJECTIVE AND SCOPE

The objectives were to review the University's controls and procedures over inventory and retail sales at the Fruit Experiment Station. The scope included, but was not necessarily limited to the year ended June 30, 2018.

SUMMARY

This report includes recommendations to improve inventory controls and procedures, develop additional monitoring and planning for the Mountain Grove Cellars fund, enter into a written agreement for bee

keeping, adopt a formal policy governing discounts, ensure sales tax is charged and paid correctly, and ensure transfers from Foundation accounts are timely.



Donna K. Christian, CPA, CGFM,
Director of Internal Audit and Compliance



Natalie B. McNish, CFE, CGAP
Senior Internal Auditor

Audit Field Work Completed: August 30, 2018

OBSERVATIONS, RECOMMENDATIONS AND MANAGEMENT RESPONSES

The Fruit Experiment Station, located in Mountain Grove, MO, grows various fruits which are used for research; processed into wine, spirits, or fruit products; or sold fresh. During our review of controls and procedures in place to track these products, we identified the following:

1. Inventory Controls

Inventory controls and procedures should be improved over each type of product sold.

A. Wine and Spirit Inventory

Inventory reports filed with the U.S. Department of Treasury, Alcohol and Tobacco Tax and Trade Bureau (TTB) are not always accurate and are not sufficiently reviewed to identify the inaccuracies. In addition, the campus does not track cost to produce wine and spirits for resale (cost of goods sold) or track inventory received, cost of goods sold, or specific sales for miscellaneous items.

- Information reported to the TTB is not reconciled to sales reports or analyzed over a period of time to identify discrepancies. Auditors completed a count of all inventory onsite on May 7, 2018 and compared those counts to the TTB report filed for the month ending April 30, 2018. Of the 17 types of alcohol products reviewed, auditor's inventory counts for 5 products were higher than reported to the TTB for the prior month. In addition, auditors prepared a reconciliation of bottled alcohol production using the monthly reports filed for fiscal year ended June 30, 2018 and found the following:

Beginning bottled inventory – 06/30/2017	1,805
Plus: Inventory bottled during FY2018	2,388
Less: Bottles sold	2,293
Bottles tasted	282
Bottles sold/gifted/tasted	230
Bottles used in competition	37
Bottles missing	11
Bottles gifted	5
Calculated ending bottled inventory	1,335
Reported ending bottled inventory – 06/30/2018	1,469
Difference	134

In addition, staff also maintain an Excel spreadsheet of alcohol sold or gifted which contained amounts different from those shown in the table above.

- The campus does not track the cost involved in preparing these products for sale. While the crops grown and vinification/distillery processes are educational in nature, costs related to bottling, labeling, and preparing the product for sale are commercial and should be tracked to ensure product prices are reasonable to recoup costs not specifically related to education.
- The campus does not track items received or the costs of goods sold for miscellaneous wine and spirit items such as bottle openers and wine glasses. On May 7, 2018, the campus held 10 bottle openers and 320 wine glasses in inventory.

B. Fruit Product Inventory

The campus does not track fruit products received for processing; costs related to processing/preparing each product for resale, or track some sales by specific item categories. In addition, the campus does not monitor inventory turnover to prevent over production of some items and does not complete a periodic physical inventory.

On May 7, 2018, auditors found the following fruit product inventory on hand:

Type	Volume
Pure Honey 16oz	470 jars
Pure Honey 24oz	13 jars
Comb Honey 16oz	8 containers
Honey Dippers	32 items
Apple Butter	913 jars
Norton Grape Jelly	991 jars
Elderberry Syrup	43 bottles
Elderberry Preserves	111 jars
Elderberry Juice	191 bottles

Based upon recorded sales during the year ended June 30, 2018, the campus has enough apple butter on hand to fill sales for 7.8 years, enough grape jelly for over 9 years. It is likely that some of these products will go bad or have to be reprocessed before they are sold. Jars of honey had to be reprocessed in 2017 because of crystallization. Additionally, to improve inventory turnover and increasing sales, consideration should be given to selling inventory at other campus locations such as the Springfield and West Plains bookstores. Further, conducting a periodic physical inventory may aid in managing the amount of product on hand to prevent an excess supply of certain products.

C. Fresh Fruit Inventory

The campus does not track the volume of fresh fruit inventory received for resale, and as a result, cannot validate the reasonableness of sales or determine spoilage. Prices for the fresh fruit are set by professors who supervise fruit production and harvesting, and are based upon quality/size of product and current market prices for farmers markets. Sale prices and amount sold are tracked using an Excel spreadsheet prepared by the staff. According to this spreadsheet the campus sold the following fresh fruit inventory during the year ended June 30, 2018:

Type	Volume
Apples	9,325.50 pounds
Peaches	3,914.69 pounds
Pears	2,272.49 pounds
Grapes	1,858.24 pounds
Blueberries	290.80 pounds
Cherries	52.00 pounds
Other – Pawpaws, Chestnuts, etc.	156.34 pounds
Raspberries	1,858.24 ½ pint containers

To better account for fresh fruit inventory and sales, the volume of inventory received and sold should be tracked.

2. Financial Monitoring and Planning

Additional monitoring and planning is needed for the Mountain Grove Cellars fund. Revenues and expenses related to wine and spirit production are tracked in this fund. The financial activity for this fund shows sales revenue has decreased nearly 40% in the last four years, and as a result, the fund balance has deteriorated. The chart below shows the fund's balances, the operating loss incurred during fiscal years 2018 and 2017, and the declining fund balance resulting.

	Fiscal Year Ended June 30,			
	2015	2016	2017	2018
Revenue	\$38,313	\$31,308	\$ 29,563	\$ 23,373
Expenses				
Supplies	25,899	13,876	28,217	16,436
Services	3,423	3,039	4,906	1,218
Travel	2,575	1,320	2,110	1,145
Other	4,143	6,059	4,829	5,131
Total Expenses	\$36,040	\$24,294	\$ 40,062	\$ 23,930
Operating Profit (Loss)	\$ 2,273	\$ 7,014	\$(10,499)	\$ (557)
Net Asset Carryforward	\$10,000	\$17,014	\$ 6,515	\$ 5,958

The purpose of wine and spirit production is both academic and commercial. Balancing these two areas is important. A review of sales revenue should be performed to ensure revenues are sufficient to fund future operations.

3. Written Agreement

The campus does not have a formal written agreement to document the benefits and accommodations provided to a bee keeper who maintains his personal hives and bees on University property, or the University's purchase of honey and honey comb products from the same bee keeper. Bees are a vital part of the entomology studies conducted at the campus, and their presence on the campus is important; however, a written agreement is necessary to ensure all parties are adequately protected.

4. Discounts

The campus does not have a formal written policy to govern discounts provided for product sales or room rental. In addition, discounts are not provided consistently and some invoices are not adequately detailed to reflect discounts, if provided.

According to staff, the following discounts are offered:

- University departments and employees are provided a 10% discount on non-alcohol purchases.
- Anyone who purchases 12 items or more, regardless of type, is provided a case discount of 10%.
- Wholesale purchases are provided a 10% discount.
- Not-for-profit entities are provided a 50% discount on room rental.

During our review of 50 invoices, we identified 15 wholesale invoices and 2 University invoices without sufficient detail to show discounts provided, if any; 6 invoices showing more than one discount provided but with different application (some got 20% off all items and some got 10% off non-alcohol and then another 10% off the total); 5 invoices to University departments reflected no discount on non-alcohol purchases; 2 invoices provided the University discount to alcohol purchases. Having a formal written policy would provide guidance to employees generating invoices and completing sales and help ensure more equitable discount application.

5. Sales Tax

Multiple issues were noted with regard to sales tax charged and paid on retail sales. These issues were discussed with staff and changes were implemented during fieldwork.

- A. The campus was incorrectly registered with the Missouri Department of Revenue as being a retail business located inside the city limits of Mountain Grove. The campus is not annexed into the city limits, though the highway running through campus has been annexed, which created the confusion. Because of the incorrect registration, the Missouri Department of Revenue provided sales tax information which included a 3% city sales tax. The Mountain Grove campus used this information to determine the sales tax rate charged. As a result, the campus has been charging 9.1% for non-food sales and 6.1% for food sales. The actual tax rates for this location are 6.1% for non-food sales and 3.1% for food sales.
- B. When sales revenues were deposited, staff completed a money received report showing the types of taxable and tax-exempt sales. However, taxable sales for non-food and food sales tax rates were coded the same, making it difficult for Financial Services to determine the amount of sales at each tax rate when completing the sales tax return. As a result, Financial Services reported nearly all sales recorded as food sales, which resulted in the underpayment of some sales taxes collected.
- C. The campus incorrectly classified alcohol as a food product when determining the sales tax rate to charge. Due to the incorrect sales tax rates being charged as reported in 1 above, the tax rate charged was actually correct (6.1%), but the inclusion of these products in the food sales category was incorrect.
- D. The campus incorrectly classified wreaths made from grape vine cuttings as a tax-exempt product. While grape vine cuttings sold to grow new agriculture product and hay sold to feed livestock are exempt from sales tax, grape vines do not qualify for this exemption because they no longer serve an agricultural purpose once crafted into a wreath.

6. Transfers from Foundation Accounts

Transfers from Foundation accounts for the payment of invoices are not processed timely. The College of Agriculture utilizes an account held by the Foundation to send various gift baskets to donors or special guests of the college. When a gift basket is requested, an invoice is prepared, but the transfer from the Foundation to the College of Agriculture is not always processed timely. During our review of invoices, we noted the time between invoice date and transfer was sometimes as long as 200 days.

Recommendations

- 1. The William H. Darr College of Agriculture, Fruit Experiment Station, should:
 - A. Complete periodic reconciliations of TTB reports and other sales records to ensure accuracy of records, track costs to produce wine and spirits for resale, and develop a method to track inventory received and costs of goods sold for miscellaneous items.
 - B. Develop procedures to track fruit product received for processing, costs related to processing and preparing products for resale, and track all sales by specific item categories. In addition, the campus should periodically complete a physical inventory to help manage supply and to compare to sales. Further, the campus should monitor inventory turnover and review options for improving this turnover by diversifying sales locations.
 - C. Track the volume of fresh fruit inventory received for resale and periodically review inventory received and sold to support sales and identify spoilage.
- 2. The William H. Darr College of Agriculture, Fruit Experiment Station, should more closely monitor the financial health of the Mountain Grove Cellars fund, and develop a plan to improve sales revenue or reduce costs in order to stabilize or improve the fund balance and ensure sufficient capital is available for continuing operations.

3. The William H. Darr College of Agriculture, Fruit Experiment Station, should work with the Office of General Counsel to formally document the bee keeper and honey production agreement.
4. The William H. Darr College of Agriculture, Fruit Experiment Station, should develop a policy outlining discounts which will be provided on sales for each category, and ensure the equitable application of those discounts when invoicing. All discounts provided should be clearly identified on the invoice and any discount applied outside of the policy should be accompanied by documented approval from the appropriate management.
5. The William H. Darr College of Agriculture, Fruit Experiment Station, and Financial Services should work to ensure:
 - A. The Mountain Grove campus is properly registered with the Missouri Department of Revenue, and the correct sales tax rates are charged.
 - B. Taxable sales are recorded into separate revenue accounts for food and non-food sales to ensure the tax rate charged to the customer is the tax rate paid to the State.
 - C. Products are correctly classified as non-food or qualifying food products.
 - D. Sales tax is charged on all taxable items.
6. The William H. Darr College of Agriculture, Fruit Experiment Station, should ensure transfers from the Foundation are processed more timely.

Management's Responses

1. *A. TTB reports are prepared and reviewed monthly. In addition, the previous months report will be verified for accuracy at that time.*
B. Fruit reserved for processing and the related costs will be put in a detailed excel spreadsheet. It will be reviewed annually along with semi-annual physical inventories. The sale of processed fruit products at other locations is being explored.
C. The feasibility of tracking fresh fruit inventory is under examination for cost effectiveness.
2. *The Mtn. Grove Cellars fund will be analyzed and all expenditures from the account will be reviewed monthly. A plan to improve revenue will be implemented with additional sales to licensed retailers.*
3. *The College of Agriculture staff is working with the University's General Council on an MOU which details an agreement with our bee keeper and the honey production.*
4. *A discount policy has been written which clearly outlines discounts on sales for the various products and room rentals.*
5. *With the assistance of Financial Services and Internal Audit, these recommendations have been implemented and sales taxes are now appropriately charged and paid.*
6. *To ensure more timely transfers of funds from the Foundation, a new policy has been developed and implemented.*

Financial Information
Fiscal years ended June 30,

	Mountain Grove Cellars Fund		Mountain Grove Fruit Sales Fund	
	2017	2018	2017	2018
Revenue				
Sales	9,563	23,373	38,575	29,611
Total Revenue	\$ 29,563	\$ 23,373	\$ 38,575	\$ 29,611
Expenses				
Equipment	-	-	-	17,471
Supplies	28,217	16,436	7,871	4,663
Services	4,906	1,218	4,576	8,044
Travel	2,110	1,145	-	360
Other	4,829	5,131	1,293	1,033
Total Expenses	\$ 40,062	\$ 23,930	\$ 13,740	\$ 31,571
Transfer In (Out)	-	-	\$ 351	-
Operating Profit (Loss)	\$ (10,499)	\$ (557)	\$ 25,186	\$ (1,960)
Fund Balance	\$ 6,515	\$ 5,958	\$ 55,705	\$ 53,745