

# Kentucky Fruit Facts

February 2025

<https://horticulture.ca.uky.edu/ky-fruit-facts>

Daniel Becker, Editor

## Inside This Issue:

<b>Fruit Crop News</b> .....	<b>1</b>
<b>Upcoming Meetings</b> .....	<b>2</b>
<b>Input Needed for SWD Impact Survey</b> .....	<b>2</b>
<b>Neopetalotriopsis Disease in Strawberry</b> .....	<b>3</b>
<b>Virtual IPM Training School</b> .....	<b>3</b>
<b>Woolly Apple Aphids Don't Really Leave</b> .....	<b>4</b>
<b>Budgeting Resources for Specialty Crops</b> .....	<b>5</b>
<b>Southern Berry Farms Continue to Grow</b> .....	<b>5</b>
<b>Receiving Fruit Facts on the Internet</b> .....	<b>7</b>

## Fruit Crop News

*Daniel Becker, U.K. Extension Associate*

January is usually one of the calmer months for growers, this one however has had several notable winter weather events and overall was colder than average. Growers with high tunnels were busy with protection activities including snow and ice removal. Others had to contend with power outages and frozen pipes as well as debris cleanup.

A storm on January 5 brought freezing rain and snow accumulation across the state and led to the cancellation of the 2025 Fruit & Vegetable Conference. The UKREC and surrounding areas received about ¼” of ice and a little over an inch of snow. Areas further west and south were lucky and experienced mostly rainfall while areas further north and west had more ice and snow build up. While there was not any limb breakage on-station the ice did bring down several sections of the deer fence which we are repairing.

Later in the month a cold front passed through the state which brought subfreezing temperatures that lasted from January 19 through 22. Single digits above and below zero were recorded by mesonet stations

across the western and southern counties while certain counties in the northern and eastern regions experienced lows of negative 10 to 13 degrees. Injury to fruit buds of erect thornless blackberry, peach and nectarine, and European grapes may be a concern in these areas, particularly for weak plants or for those that are in suboptimal health. I dissected buds and canes of ‘Ponca’ blackberry and did not find any tissue discoloration, but our lowest temperature was only five degrees. Randomly selecting shoots from several plants and using a razor blade to cut a cross section through the center of around 100 buds per cultivar should give a fair assessment of injury if you want to check for yourself.

Looking ahead, the [NOAA Climate Prediction Center](#) is forecasting slightly above normal temperature and precipitation throughout much of February. The three-month seasonal outlook (Feb.-Mar.-Apr.) is showing near normal to slightly above normal temperature with greater probability of above normal precipitation along the Ohio River. With the end of winter on the horizon it’s time to start planning for dormant to delayed dormant fungicide sprays. These include applications to manage fireblight of apples and pears, peach leaf curl, Phomopsis cane blight of blueberry, and anthracnose of blackberry. Important early season insect pests of tree fruits include San Jose scale, rosy apple aphid, and European red mite. Extension publications addressing these and other pests can be found on the UK [Plant Pathology](#) and [Entomology](#) webpages, with specific pesticide recommendations located in the Midwest Fruit Pest Management Guide ([ID-232](#)).

For those who had planned to attend the 2025 Fruit & Vegetable Conference, educational content is now available through a Kentucky Horticulture Council webpage. The webpage has links to recorded video presentations organized as YouTube playlists of conference sessions. Also on the webpage is information on upcoming webinar make-up sessions and materials from exhibitors and sponsors. Registered



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Lexington, KY 40546-0019

attendees should have received an email notification with a webpage link and password. If you have not received this information or have trouble accessing the webpage and videos, get in touch with Dakota Moore, [dakota@kyhortcouncil.org](mailto:dakota@kyhortcouncil.org), 615-339-3632.

## Upcoming Meetings

*Times are listed in Central Time (CT) or Eastern Time (ET) depending on location.*

**Feb. 3-6. North American Raspberry & Blackberry Association (NARBA) & North American Strawberry Growers Association (NASGA) Conference.** OUTRIGGER Kona Resort & Spa, 78-128 Ehukai St., Kailua-Kona, HI 96740. The conference will start with an opening reception on Monday with general sessions on Tuesday and Wednesday. On Thursday an Island of Hawai'i agricultural tour will be offered. For details, visit the conference [website](#).

**Feb. 4-7. CiderCon.** Chicago Hilton Hotel, 720 S. Michigan Ave., Chicago, IL 60605. For more details visit <https://ciderassociation.org/cidercon2025/>.

**Feb. 6. Tri-State Green Industry Conference.** 8:00am – 5:00 pm ET. Sharonville Convention Center, 11355 Chester Rd., Cincinnati, OH 45246. For details visit: <https://u.osu.edu/greenindustryconference/>.

**Feb. 11. Southwestern Illinois Commercial Tree Fruit School.** 8:30 am – 1:30 pm CT. Barefoot Restaurant, 106 S. Water St. Hardin, IL 62047. More information about this event can be found [here](#).

**Feb. 12. Southern Illinois Fruit and Vegetable School.** Registration starts at 8:00 AM, program tracks from 8:30 am – 3:15 pm CT. Doubletree Meeting & Event Center 222 Potomac Boulevard, Mt. Vernon, IL 62864. More information on this event and a link to register can be found [here](#).

**Feb. 13. Blackberry Production Meeting.** 5:30 pm ET. Will be held at Fire Station #2, 3175 Flemingsburg Rd., Morehead, KY 40351. For questions contact Amanda Potter, Extension Agent, Agriculture and Natural Resources, 4-H & Youth Development, [amanda.potter@uky.edu](mailto:amanda.potter@uky.edu), (606) 784-5457.

**Feb. 13-15. Pick TN Conference.** Franklin Cool Springs Marriott, 700 Cool Springs Blvd., Franklin, TN 37067. For a conference schedule or to register, visit <https://www.picktnconference.com/>.

**Feb. 21-22. Eastern Kentucky Farmer Conference.** London Community Center, 529 S. Main St., London, KY 40741. Follow this [link](#) for more information about registration, lodging and for scheduled programs.

**Mar. 4-5. Indiana Small Farm Conference.** Hendricks County Fairgrounds, 1900 E. Main St., Danville, IN 46122. Conference schedule and registration information can be found [here](#).

**Mar. 18 (Tuesday). KSHS Fruit Grower Orchard Meeting.** Schedule TBD. University of Kentucky North Farm. The entrance gate address is 1925 Research Farm Road, Lexington, KY 40511, off Newtown Pike (KY-922). 'Field Day' signs will direct you to the orchard. If using a GPS for navigation, the orchard address is Becky Sue Lane, Lexington, KY 40511. For questions, contact Brent Arnoldussen, [brent.arnoldussen@uky.edu](mailto:brent.arnoldussen@uky.edu).

**Apr. 19 (Saturday). KY Nut Growers Association Spring Meeting.** Nelson County Cooperative Extension Office, 317 S. Third St., Bardstown, KY 4004. For questions, contact John Strang, [jstrang@uky.edu](mailto:jstrang@uky.edu), (859) 257-5685.

**May 15 (Thursday). KSHS Fruit Grower Orchard Meeting.** Schedule TBD. Hinton's Orchard, 8631 Campbellsville Rd., Hodgenville, KY 42748.

## Your Input Needed! National SWD Impact Survey

*Hannah Burrack, Professor & Chair, Department of Entomology, Michigan State University.*

Dear small fruit growers, as part of a national team of entomologists studying the management of spotted-wing drosophila (SWD), we are reaching out with a request for assistance to help understand the current impacts of SWD on your farm and how these impacts may have changed in the last 10 years. If you are willing to share insights from your farm, farms you manage, or growers you work with, **please complete**

**this short survey, which will take about 15 minutes or less:** [2024 SWD Impact Survey](#).

This information will be used to develop new research goals as part of a USDA Specialty Crop Research Initiative proposal under development. It will also be compared to information collected in similar surveys in [2013](#) and [2014](#) to help us understand where challenges still exist for SWD management and what improvements have been made over the last 10 years and shared in extension and research publications. For more information about this survey, contact Hannah Levenson, [hklevens@ncsu.edu](mailto:hklevens@ncsu.edu), (919) 434-7882.

## Neopestalotiopsis Disease in Strawberry: A New Reality for Kentucky Growers Webinar

*Nicole Gauthier, Extension Plant Pathologist, and Kim Leonberger, Plant Pathology Extension Associate, University of Kentucky*

Join University of Kentucky Extension Fruit Specialists for a webinar on **February 6, 2025**, from 6:00 pm to 7:30 pm **ET** / 5:00 pm to 6:30 pm **CT** via Zoom. The webinar will focus on Neopestalotiopsis, an emerging disease threat to strawberry production. Extension Plant Pathologist, Dr. Nicole Gauthier will share disease identification and management information, and Extension Horticulturalist, Dr. Shawn Wright, will discuss methods for starting plugs.

Register [here](#). A Zoom link will be provided once registration is complete.

For additional information about Neopestalotiopsis see the NEW *Neopestalotiopsis Disease of Strawberry* factsheet ([PPFS-FR-S-12](#)).

## Virtual Integrated Pest Management Training School

*Jason Travis, Plant and Soil Sciences Extension Associate*

The annual 2025 Integrated Pest Management (IPM) Training School meeting will be entirely held

via Zoom on March 12 from 8:00 am to 4:00 pm **CT** / 9:00 am to 5:00 pm **ET**. Fourteen UK-CAFE professors, an Extension Associate, and a guest speaker (Dr. David Owens from University of Delaware), will discuss relevant topics related to the major pest problems and best strategies for healthier crops and pest management. To address some concerns about insect pests related to global warming, Dr. Nick Teets will discuss basic principles of insect responses to climate change.

The program includes two sessions: Field Crops (morning) and Horticulture (afternoon). To register, follow this [link](#). Please note that registration is mandatory to receive CEU credits.

- **8:00-8:15 am CT:** Welcome – Dr. Ric Bessin
- **Morning:** Field Crops
  - **8:15:** Updating nitrogen, phosphate and potash rate recommendations (AGR-1) for Kentucky grain growers – Dr. John Grove
  - **8:40:** Fertilization methods for organic crop production – Dr. Edwin Ritchey
  - **9:05:** Improving ROI for corn fungicide applications – Dr. Kiersten Wise
  - **9:30:** Management of foliar diseases of soybean – Dr. Carl Bradley
  - **9:55:** Coffee break
  - **10:10:** Slug observations and implications from Delaware – Dr. David Owens, Michael Crossley, and Ben Sammarco, University of Delaware
  - **10:35:** Three emergent soybean pests: snails, three-cornered alfalfa hopper and bean leaf beetles – Dr. Raul Villanueva
  - **11:00:** Potential responses of insect pests to climate change – Dr. Nick Teets
  - **11:25:** Weed control in 2025 and beyond – Dr. Travis Legleiter
- **11:50:** Lunch break
- **Afternoon:** Horticulture
  - **1:00:** Difficult weeds and management strategies – Dr. Shawn Wright

- **1:25:** Techniques for managing common invasive plants – Dr. Ellen Croker
- **1:50:** Soil solarization: an alternative management method for many issues – Dr. Rachel Rudolph
- **2:15:** Coffee break
- **2:30:** Nursery IPM practices to up your disease and pest management game – Ms. Tara Vaughn
- **2:55:** Spotting trouble: spotted lanternfly and Kentucky – Dr. Jonathan Larson
- **3:20:** An overview of cold damage and prevention for fruit crops – Dr. Brent Arnoldussen

Each session will offer the following CEUs to pesticide applicators and certified crop advisers.

- **Field Crops**

- Pesticide Applicator – 1 CEU for Categories 2, 3, & 10; 3 CEU's in Category 1A
- Certified Crop Adviser – 1 CEU in Nutrient Management; 3 CEU's in IPM

- **Horticulture**

- Pesticide Applicator – 1 CEU for Categories 1A, 2, & 3
- Certified Crop Adviser – 2 CEU's in IPM; 1 in Crop Management

## Woolly Apple Aphids Come and Go, But Don't Really Leave!

*Ric Bessin, Extension Entomologist, UK.*

There are several species of aphids attacking apples, and among them, woolly apple aphid is the most difficult to manage. Unlike other aphids, this species attacks trees above and below ground, but it is the damage you don't see that can cause most damage to the health of trees. Mature trees usually suffer little damage from root infestations, but root infestations are very damaging to young trees. Control of these aphids is very difficult when they attack roots. Yellowish

foliage is a sign that woolly apple aphid may be infesting roots.

### **Description**

Woolly apple aphid differs from other apple aphids in appearance, life cycle, and type of damage inflicted. A colony appears as a cottony mass, generally clustered in wounds and pruning scars on trunks and branches of trees (Figure 1). Colonies form on new wood or at wound sites on trunks, limbs, and twigs where bark is thin. Pruning, hail damage, and egg-laying wounds by the periodical cicada can create the ideal wound sites for attack by this pest. Aphids may occur on water sprouts in the center of the tree as populations grow. Woolly apple aphid feeds with piercing-sucking mouthparts; wood will begin to swell and form galls at these feeding sites. As the number of aphids on aboveground portions of trees increase, many work their way down to roots and trunks below ground surface.



**Figure 1.** Woolly apple aphid colonies produce white, cottony thread-like secretions, but the aphids themselves are purple. (Photo: Ric Bessin, UK)

Root systems of nursery stock can be damaged by woolly apple aphid, and severe root infestations can stunt or kill young trees. Infested trees often have short fibrous roots, which predisposes them to being easily uprooted. Swollen galls also form on roots (Figure 2); galls increase in size from year to year and are sites

where fungi can attack. Aphid feeding on root systems also disrupts the nutrient balance of root tissue, which can affect growth of other parts of trees. Trees can have above-ground infestations of woolly apple aphid but no root infestations. Rootstocks vary in susceptibility to woolly apple aphid and susceptible rootstocks will form galls around the infestation sites. M111 or M106 rootstocks have resistance if woolly apple aphid is a serious problem.



**Figure 2.** Woolly apple aphid feeding on roots that produces galls and greatest damage. (Photo: Ric Bessin, UK)

### **Monitoring & Management**

When monitoring for woolly apple aphid, examine pruning scars on several trees. Carefully brush away the white waxy secretions that surround colonies to determine if live aphids are present. Predators, such as lady beetles, hover fly larvae, and lacewing larvae can completely destroy colonies, but waxy residue will remain. Treatments for woolly apple aphid are recommended when 10% of the pruning scars are infested with live colonies.

## **Budgeting Resources for Specialty Crop Farmers**

*Camille Stevens, Extension Associate, Center for Crop Diversification (CCD)*

For farmers working with limited resources, proper allocation of budgets can help identify market opportunities, streamline operations, and ensure long-term profitability. The process involves careful consideration for production costs (fixed and variable), marketing strategies, and consumer trends, creating a roadmap for success in the ever-changing agricultural landscape. Learn more about budgeting and utilizing the CCD budgeting resources by following this [link](#).

## **Southern Berry Farms Continue to Grow**

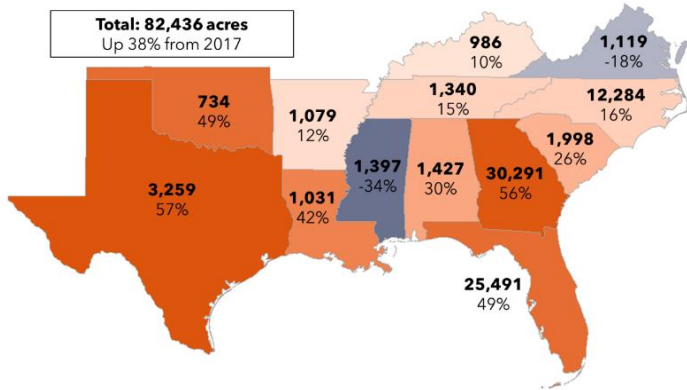
*Windiam Sawadgo, Assistant Professor and Extension Economist, Department of Agricultural Economics and Rural Sociology, Auburn University*

The U.S. Department of Agriculture released data from the 2022 Census of Agriculture in early 2024. The Census of Agriculture provides information on farm-level acres and sales for most crops, and allows us to compare how farm enterprises have changed over time. In this article, we evaluate how southern berry production has evolved over the past 15 years. Overall, there has been growth in the berry industry in terms of number of operations, and average berry farm size across the region.

### **Berry Area**

The area in berries in the South totaled 82,436 acres in 2022, as shown in Figure 1. This figure includes both bearing and non-bearing berry area. Georgia led the way with 30,291 acres in berries followed by Florida at 25,491 acres. All states in the region except for Mississippi and Virginia increased their berry acreage between 2017 and 2022. Texas led the way with a 57% increase in berry area from 2017 to 2022, with Georgia close behind at a 56% increase. The southern region outpaced the U.S. in berry area growth, as the U.S. as a whole increased by 18% over the five-year period whereas berry area in the South

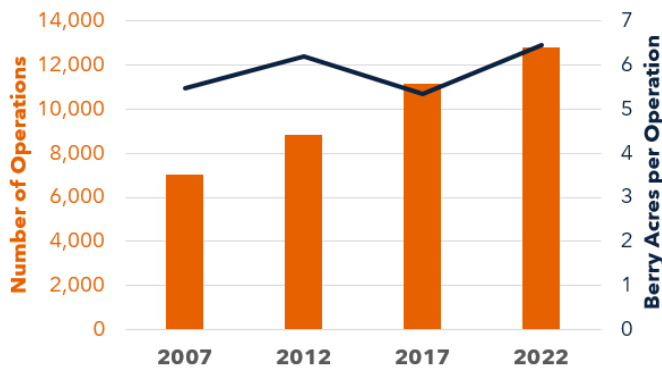
increased by 38%. The southern states shown in the map accounted for 23% of U.S. berry acreage in 2022. (Figure 1).



**Figure 1.** 2022 berry acres by state and percent change from 2017. Data source: USDA-NASS.

**Operation Scale**

The number of berry operations has increased by 15% from 2017 to 2022, up to 12,794 operations (Figure 2). This follows the 26% increase that occurred from 2012 to 2017. While both berry acres and operations have increased, acreage has exceeded the increase in the number of farms, which has resulted in an increase in the average size of a berry operation. From 2017 to 2022, the average berry operation in the South increased from 5.3 to 6.4 acres per operation. However, this increase was largely driven by Georgia and Florida, which averaged 19.9 and 15.9 berry acres per operation in 2022, respectively. The majority of the region’s states averaged between 1 and 3 berry acres per operation.



**Figure 2.** Southern berry operations and average area per operation, 2007-2022. Data source: USDA-NASS.

This increase in berry operation size is likely due to *economies of scale*, which occur when the cost per unit of output decreases as the amount of output produced increases. This means that larger farms exhibit a lower cost of production per acre. For example, a grower that invests in a mechanized harvester would decrease the average cost of the machinery by using the harvester on a larger number of acres, hence reducing the cost per acre and per unit of berries harvested. Additional economies of scale may come from hiring labor (e.g. through the H-2A program) or other machinery and input use.

**Berry Sales**

Berry sales for the region totaled \$1.12 billion in 2022, up 120% from 2017 (Table 1). Over half of the region’s berry sales were from Florida, which accounted for \$634.95 million. However, all states in the region had increases in sales over the period.

Table 1: Berry Sales by State and Year, 2012-2022 (million dollars)

State	2012	2017	2022
Alabama	4.11	4.08	12.39
Arkansas	3.21	3.38	7.02
Florida	233.16	285.48	634.95
Georgia	74.90	98.11	215.59
Kentucky	2.60	2.62	8.94
Louisiana	3.48	---	9.32
Mississippi	12.69	10.24	10.79
North Carolina	54.42	69.96	125.95
Oklahoma	0.44	1.03	2.48
South Carolina	7.29	13.04	44.35
Tennessee	3.90	5.75	12.92
Texas	7.61	7.31	19.77
Virginia	4.67	7.47	15.10
<b>Total</b>	<b>412.48</b>	<b>508.47</b>	<b>1,119.55</b>

Data Source: USDA-NASS  
 Note: 2017 berry sales withheld for Louisiana to avoid disclosing data for individual operations

Several states observed increases in the average percentage of farm sales that come from berries, suggesting a growing importance of berry enterprises. Farms with berries in Florida had 6.2% of their sales come from berries, almost double the figure from

2017. Georgia had a similar increase from 1.0% in 2017 to 1.6% in 2022, and South Carolina increased from 0.6% to 1.0% over the same period. The other states in the region had berry sales account for less than 1% of their berry operations' total farm sales.

### Conclusion

There has been continued growth in the number of berry operations, the average size of berry operations, and total area in berry production in the South. Florida and Georgia lead the region in these categories, but most states have had growth. Overall, the region has increased its presence in the U.S. berry market, and berry enterprises make up a larger proportion of farms' total sales.

However, high input prices pose a challenge for small-fruit operations, similar to other specialty crop farms. High labor costs have precipitated demand for mechanization and automation and increased reliance on the H-2A guest-worker program. Given the nature of these programs, it is likely that berry operations will continue to exhibit economies of scale and become larger to benefit from the cost advantages.

*Originally published July 21, 2024 in the Summer 2024 issue of Small Fruit News (Vol. 24, No. 3) by the Southern Region Small Fruit Consortium, <https://smallfruits.org/>.*

## Receiving Fruit Facts on the Internet

By subscribing to the email notification service, you will receive an email announcement when each new issue is posted on the web with a link.

To subscribe, send an email message:

TO: [listerv@lsv.uky.edu](mailto:listerv@lsv.uky.edu)  
SUBJECT: Fruit Facts  
MESSAGE: subscribe KY-FRUITFACTS  
Followed by a blank line

OR to unsubscribe, the lines:

Signoff KY-FRUITFACTS

Followed by a blank line

You should receive confirmation by return email. If you have a problem, or if you wish to communicate with a person about "fruitfacts", the owner's address (the TO: line of the message is: [owner-ky-fruit-facts@lsv.uky.edu](mailto:owner-ky-fruit-facts@lsv.uky.edu)).

# wildlife control tips for KY specialty crop growers

FIND YOUR LOCAL PRIVATE LANDS BIOLOGIST (PLB) AND LOCAL CONSERVATION OFFICER (CO) CONTACTS USING THE ONLINE TOOL SEARCHABLE BY COUNTY:

[HTTPS://APP.FW.KY.GOV/WEBCONTACT/DEFAULT.ASPX](https://app.fw.ky.gov/webcontact/default.aspx)



GENERAL NUISANCE WILDLIFE CONTROL INFO

[HTTPS://FW.KY.GOV/WILDLIFE/PAGES/NUISANCE-WILDLIFE.ASPX](https://fw.ky.gov/wildlife/pages/nuisance-wildlife.aspx)

DEER CONTROL PERMIT INFO

[301 KAR 2:176](#)

OUT-OF-SEASON DEER CONTROL INFO

[KRS 150.170](#)

IF YOU ANTICIPATE CROP DAMAGE OR HAVE OBSERVED ANIMAL DAMAGE CAUSING ECONOMIC IMPACT, DEVELOP A

## FARM WILDLIFE MANAGEMENT PLAN



KY FISH & WILDLIFE PERSONNEL CAN HELP YOU NAVIGATE LAWS & REGULATIONS AND REQUIRED LICENSES AS WELL AS REVIEWING CONTROL MEASURES APPROPRIATE FOR THE ANIMAL PEST CAUSING DAMAGE, INCLUDING:

- EXCLUSION
- REPELLANTS
- HUNTING
  - IN-SEASON CONTROL PERMITS
  - OUT-OF-SEASON PERMITS

BE SURE TO DISCUSS YOUR FARM FOOD SAFETY PLAN AND STRATEGIES FOR TIMELY ANIMAL REMOVAL

