

EEC News

Campbell County Cooperative Extension • Environmental Education Center
1261 Race Track Road • Alexandria, KY 41001 • (859) 694-1666

Campbell County Environmental Education Center Newsletter

November 2022

Spotted Lanternfly: Be on the lookout for this invasive species

Source: Jonathan L. Larson, Ric Bessin, Extension entomologists and Ellen Crocker, Extension forestry specialist

Fast Facts

- Spotted lanternfly (SLF) is an invasive species, originally from Asia, that was first confirmed in the US in 2014.
- The adult is distinctive looking, with front wings that have a mixture of stripes and spots while the back wings have a bright red color that contrasts with white, black, and khaki coloration on the rest of the body.
- Tree of heaven is their primary host plant, but they are known to feed on over 70 different species of plants including grapes, apples, and maples.
- If you believe you have seen or captured a spotted lanternfly, please take a photo or capture the specimen and get it identified by the entomology department or submit it to a local extension professional.



Figure 1: Adult spotted lanternflies are distinctive looking insects with a pink-khaki coloration and spots and stripes on their wings. (Photo: Lawrence Barringer, Pennsylvania Department of Agriculture, Bugwood.org)

Potential Hosts

There are over 70 potential hosts for SLF. Feeding preferences change as they age, with immature nymphs feeding on a broader range of plants while adults will preferentially feed on tree of heaven. Potential hosts include willow, maple, apple, walnut, pine, poplar, and stone fruit trees. They may also be found on hops plants and grape vines.

Symptoms, Life Cycle, and Descriptions of Life Stages
Spotted lanternflies feed by inserting piercing-sucking mouthparts into the host plant which allow them to suck sap from the plant. This drain of resources stresses plants and results in other notable signs of infestation including:

- Wilted foliage
- Branch dieback

- Accumulation of "honeydew", a sticky, sugary fecal material
- Black sooty mold growing in honeydew
- Increased visitations of flies, bees, and wasps who are feeding on honeydew

SLF infestations may also cause sap to ooze from infested trees and sites often have a fermented odor to them.

In its known US distribution, the spotted lanternfly has only one generation per year. As true bugs, these insects develop through incomplete metamorphosis- starting life as an egg, then progressing through nymphal stages, before becoming an adult.

Eggs

SLF overwinters as an egg and egg masses can be found between September of one year into June of the following year. Individual eggs are laid in masses that typically contain 30-40 eggs but can hold as many as 75-78. The mass is coated in a putty like substance produced by the mother. Initially this coating is white but darkens to a tan or khaki coloration. The result is egg masses that look like a smear of mud (Figure 3). They can be found on natural objects like logs but have also been found on many human-made objects like fence posts, lawn furniture, mailboxes, and automobiles, amongst others. SLF is a "hitchhiking" pest. When eggs are laid on firewood or cars, humans often inadvertently help to introduce this pest into new areas. Once nymphs have emerged from the eggs, the spent eggs are uncovered and empty, resembling open coin purses (Figure 4).



Figure 3: Spotted lanternfly egg masses look like patches of dry, brown, mud and can be found on trees, stones, and other objects outside. (Photo: Emelie Swackhamer, Penn State University, Bugwood.org)

Tree of Heaven

Tree of heaven (Figure 2) (*Ailanthus altissima*) is an invasive plant and the preferred host of SLF. It is also a major problem on its own. A fast-growing tree that tolerates a wide range of conditions, thriving in both urban and woodland settings and outcompeting native species. Usually, it is found in disturbed urban areas, and along roadsides and railroad tracks, it also invades natural areas, particularly in woodlands following harvests when papery wind-born seeds can rapidly colonize and grow in dense stands.

Tree of Heaven ID:

- Large (1-4 feet long) compound leaves with many (10-24) spear shaped leaflets with smooth edges
- Small lobes at the base of leaflets each have a distinctive glandular bump on the underside



Figure 2: Tree of Heaven has several distinguishing characteristics, including their long leaflets, strong odor, and cantaloupe like bark. (Photo: Chuck Barger, University of Georgia, Bugwood.org)

- Branches and stems have an unpleasant smell when cut (similar to rancid peanut butter)
- Smooth green bark when young, turning gray with age
- Can be large trees (>80 feet tall) but more often seen as dense thickets of smaller trees that are clonally connected through roots
- Distinguish from native look-alikes like black walnut and sumac
- Black walnut leaflets will have more than 10 veins
- Sumac leaflets have saw tooth like edges



Figure 4: After hatching, spotted lanternfly eggs are no longer covered with the brown substance. The spent eggs are also open, resembling an open coin purse. (Photo: Kenneth R. Law, USDA APHIS PPQ, Bugwood.org)

Nymphs

Spotted lanternfly develops through four nymphal stages before reaching adulthood. During the first three instars, they are black with white dots (Figure 5). In the final nymphal instar, they are black with red patches and white dots. The nymphs with red patches are about half an inch in length (Figure 6). All nymphal stages will jump when approached. Immature spotted lanternflies can be seen from April through October.

Adults

Adult SLF are over an inch long. They are part of a group known as the planthoppers, which are related

to other insects like treehoppers, leafhoppers, and cicadas. Adult SLF are quick and will run and jump when approached. When viewed from the side, lanternflies look vaguely tear drop shaped as their head comes to a point (Figure 7). They have long legs, and their wings are held tent-like over the abdomen. Half of the first pair of wings have black dots, while the other half is covered with broken black lines (Figure 8). The color of the wings is generally described as khaki pink. When the front wings are open, the second, smaller pair of wings underneath can be seen. These are partially red with black spots, which contrasts with black and white on the other portions of the wings. Adults are typically seen from July through November.



Figure 7: Spotted lanternfly is a planthopper and they share a similar shape with cicadas, treehoppers, and leafhoppers. When viewed from the side, the lanternfly is vaguely teardrop shaped. (Photo: Richard Gardner, Bugwood.org)

that resemble this pest, some of which are highlighted in Figure 9.

If SLF is discovered, and the infestation is relatively contained, efforts will be made to locally eradicate the insects to prevent their continued local spread and establishment. This is done with a combination of insecticide treatment of potential host trees and eradication of tree of heaven and other preferred hosts. The sooner SLF is reported the better and the higher the probability of effectively controlling it.

If you do have evidence that needs evaluated, please submit photos or specimens directly to the Department of Entomology at UK through an email to the authors of this publication or through Facebook, at Kentucky Bugs. You may also reach out to your local county extension office for guidance on how to send the sample in.

CAUTION! Pesticide recommendations in this publication are registered for use in Kentucky, USA ONLY! The use of some products may not be legal in your state or country. Please check with your local county agent or regulatory official before using any pesticide mentioned in this publication.

Of course, **ALWAYS READ AND FOLLOW LABEL DIRECTIONS FOR SAFE USE OF ANY PESTICIDE!**

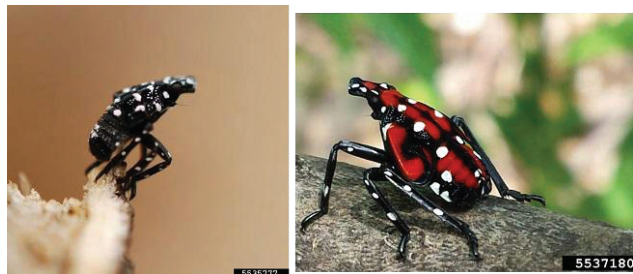


Figure 5 (L): Younger nymphs are black with white dots.

Figure 6 (R): Older nymphs are black with red patches and white dots. (Photos: Lawrence Barringer, Pennsylvania Department of Agriculture, Bugwood.org)

Potential Impacts for Kentucky

This pest threatens to impact wine production, apple growing, Christmas tree production, hops growers, and the sizable forest industries of Kentucky. As these insects feed, they decrease the plant's health and can cause mortality. Their high numbers on host plants and the recruitment of black sooty mold and stinging insects by honeydew production can decrease the recreational value of parks and backyards that are infested. Although the outcomes of infestations in diverse woodlands settings and natural areas are less clear than in more uniform agricultural and landscape settings, the added drain on trees' resources that SLF will cause may compound existing tree stress issues and trigger decline in a range of settings. The regulatory response to an invasive species as problematic as SLF can also impact Kentuckians. Restrictions on the movements of goods like lumber, the need for quarantines, and even the requirement of permits to travel or move goods out of infested areas could all have financial or quality of life consequences for Kentuckians in infested areas.

What Can You Do?

If you think you have seen a SLF, you need to either capture the specimen or take a picture of it. There needs to be some sort of evidence to verify what you have seen. There are other insects in the state



Figure 8: Spotted lanternflies are unique looking insects, with distinctly colored wings and unique patterns. The front wings are khaki pink with black spots and broken black lines. The back wings are a mixture of red, white, and black. (Photo: Lawrence Barringer, Pennsylvania Department of Agriculture, Bugwood.org)

What's Up Next?

November 2nd - 10:00am *Animal Adaptations*

November 4th - 10:00am *Winter Birding*

November 5th - 10:00am *Campbell County Landowner Expo*

November 7th - 6:00pm *Private Applicators Pesticide Training*

November 9th - 2:30pm *Winter Birding*

November 11th - 2:30pm *Animal Adaptations*

November 14th - 9am & 6pm *Beef Quality Assurance*

November 15th - 2:30pm *Animal Adaptations*

November 15th - 6:00pm *Campbell County Cattle Association Annual Meeting*

November 16th - 5:30pm *4-H Nature Club*

**CALL (859) 572-2600 / (859) 694-1666 OR VISIT
HTTPS://CAMPBELL.CA.UKY.EDU/ TO REGISTER FOR
PROGRAMS**

Find us on facebook

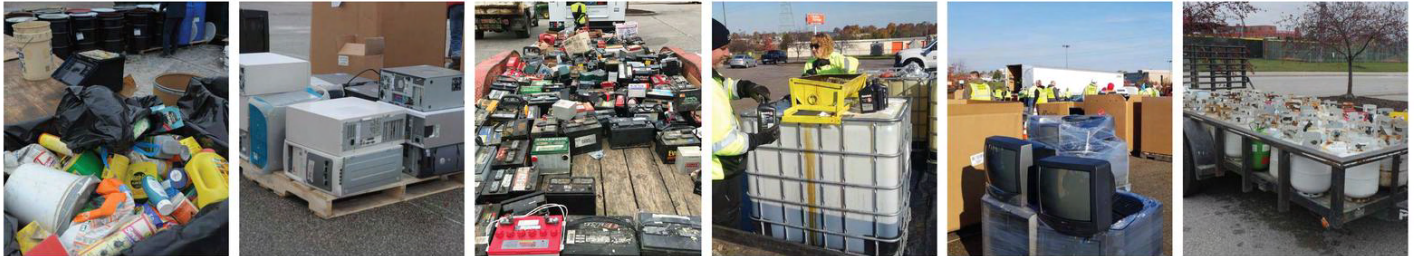
**@ Campbell County
Environmental
Education Center**

Follow us on Instagram



@ campbellcountyeec

HOUSEHOLD HAZARDOUS WASTE COLLECTION EVENT



Residents of Boone, Campbell, and Kenton Counties are welcome to dispose of their household hazardous waste for FREE at this event.

Thomas More Stadium
7950 Freedom Way, Florence, KY
Saturday, November 5th, 2022
9:00am – 2:00pm

PLEASE VISIT WWW.NKYHHW.ORG TO PRINT & COMPLETE A REGISTRATION FORM PRIOR TO ATTENDING THE EVENT

WE WILL ONLY ACCEPT:

- Aerosol cans
- Antifreeze
- Batteries (all types)
- Corrosives/Flammables (fuel, kerosene, etc.)
- Electronics (computers, monitors, keyboards, printers, cell phones, etc.)
- Ink/Toner cartridges
- Light bulbs
- Oil/Fluids
- Paint (10 can limit)
- Pesticides
- Tanks/Cylinders
- Televisions (limit of two per vehicle)

Brought to you by the Northern Kentucky Solid Waste Management Area and Northern Kentucky Household Hazardous Waste Action Coalition.

CAMPBELL COUNTY LANDOWNER EXPO



University of Kentucky
College of Agriculture,
Food and Environment
Cooperative Extension Service



Saturday, November 5
10am-2pm

Campbell County Environmental
Education Center
1261 Race Track Road
Alexandria, KY 41001

Register at
campbell.ca.uky.edu or
859-572-2600

**The Campbell
Conservancy, Inc.**

**Campbell County
Conservation**

**Campbell County
Extension**

Campbell County FFA

**Campbell County
Planning & Zoning**

**Department of
Conservation**

**Farm Services
Agency**

NRCS



Topics & Information

- Agriculture Sales Tax Exemption Number
- Agriculture Property Tax Exemption(s)
- Local, State, & Federal Cost Share Programs
- Grants Available
- Agriculture Water Quality Plans
- Farm Serial Numbers
- Nutrient Management Plan
- Marketing Opportunities
- Landowner Resources

Cooperative Extension Service
Agriculture and Natural Resources
Family and Consumer Sciences
4-H Youth Development
Community and Economic Development

Educational programs of Kentucky Cooperative Extension serve all people regardless of race, color, age, sex, religion, disability, or national origin. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating.
LEXINGTON, KY 40546



Disabilities
accommodated
with prior notification.



University of Kentucky
College of Agriculture,
Food and Environment
Cooperative Extension Service

Animal Adaptations

Come enjoy an indoor program on the animals of Campbell County and the unique traits that help them survive in the wilderness!

Campbell County
Environmental
Education Center

1261 Race Track
Road
Alexandria, KY 41001

Nov. 2nd, 10:00am ~ Nov. 11th, 2:30pm ~ Nov. 15th, 2:30pm



Registration is required. Please call (859) 694-1666 / (859) 572-2600 or register online at <http://campbell.ca.uky.edu/>

Cooperative Extension Service
Agriculture and Natural Resources
Family and Consumer Sciences
4-H Youth Development
Community and Economic Development

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, or physical or mental disability. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating. LEXINGTON, KY 40546



Disabilities accommodated with prior notification.



University of Kentucky
College of Agriculture,
Food and Environment
Cooperative Extension Service

Winter Birding

**Campbell County
Environmental
Education Center**
1261 Race Track Road
Alexandria, KY 41001

11/4 ~ 10:00am
11/9 ~ 2:30pm
11/17 ~ 2:30pm
12/6 ~ 11:00am
12/14 ~ 2:30pm

Join us for a lesson on bird I.D. and a hike around the interpretive trail to see and hear birds! Participants are encouraged to bring their own binoculars if possible.

Registration is required. Please call (859) 694-1666 / (859) 572-2600 or register online at <http://campbell.ca.uky.edu/>

Cooperative Extension Service
Agriculture and Natural Resources
Family and Consumer Sciences
4-H Youth Development
Community and Economic Development

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, or physical or mental disability. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating. LEXINGTON, KY 40546



Disabilities accommodated with prior notification.



Nature Club



University of Kentucky
College of Agriculture,
Food and Environment
Cooperative Extension Service
4-H Youth Development

2022-2023 Meeting Dates

(3rd Wednesday of Each Month)

● Sept. 21

● Dec. 21

● Mar. 15

● Oct. 19

● Jan. 18

● Apr. 19

● Nov. 16

● Feb. 15

5:30pm-6:30pm

Ages 5-15, come learn about nature and explore the outdoors with 4-H at the **Campbell County Environmental Center:**

**1261 Race Track Road
Alexandria, KY 41001**

Each participant must register each month.

Register online at campbell.ca.uky.edu

or by phone: (859) 572-2600.

Contact Ginny Butsch with any questions:

ginny.butsch@uky.edu

Cooperative Extension Service
Agriculture and Natural Resources
Family and Consumer Sciences
4-H Youth Development
Community and Economic Development

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, or physical or mental disability. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating. LEXINGTON, KY 40546



Disabilities
accommodated
with prior notification.

Private Use



University of Kentucky
College of Agriculture,
Food and Environment
Cooperative Extension Service

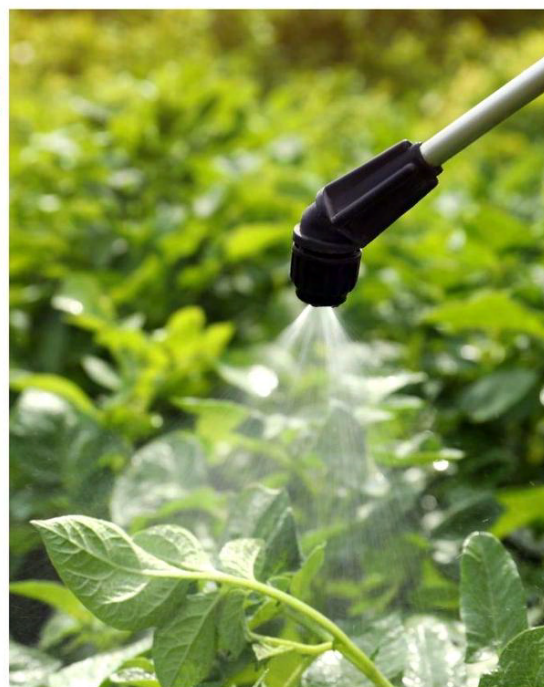
Pesticide Applicator Training

with

Campbell County Extension Agriculture Agent
Michelle Simon

Learn how to use pesticides safely!

***This training is
required if purchasing
restricted-use pesticides***



Check your license expiration date

Monday, November 7 at 6:00pm

Campbell County Environmental Education Center

1261 Racetrack Road | Alexandria, KY 41001

To register, visit campbell.ca.uky.edu or call the extension
office at 859-572-2600

Cooperative Extension Service
Agriculture and Natural Resources
Family and Consumer Sciences
4-H Youth Development
Community and Economic Development

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, or physical or mental disability. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating.
LEXINGTON, KY 40546



Disabilities
accommodated
with prior notification.



MARKETREADY PRODUCER TRAINING

MarketReady educates producers interested in expanding their business & products into wholesale, retail, & restaurant markets.

This training is free, but space is limited. Register today!

We are offering 3 virtual training opportunities*

Training Dates:

Monday, Nov. 7th 6PM EST
Wed., Nov. 9th 11:30AM EST
Friday, Nov. 11th 11:30AM EST

*all 3 trainings cover the same material

REGISTER AT: MARKETREADY.UKY.EDU/EVENTS



College of Agriculture,
Food and Environment

MarketReady™





University of Kentucky
College of Agriculture,
Food and Environment
Cooperative Extension Service

BQCA



Certification

November 14
9:00am
-OR-
6:00pm

This certification is good
for 3 years-*check to see if
you need to renew yours!*

Visit campbell.ca.uky.edu or
call 859-572-2600 to register!



Campbell County Environmental Education Center

1261 Race Track Road | Alexandria, KY 41001

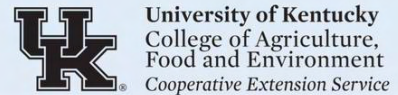
Cooperative Extension Service
Agriculture and Natural Resources
Family and Consumer Sciences
4-H Youth Development
Community and Economic Development

Educational programs of Kentucky Cooperative Extension serve all people regardless of race, color, age, sex, religion, disability, or national origin. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating.

LEXINGTON, KY 40546



Disabilities
accommodated
with prior notification.



Campbell County Cattle Association Annual Meeting

Tuesday, November 15, 2022 — 6:00 p.m.

Environmental Education Center

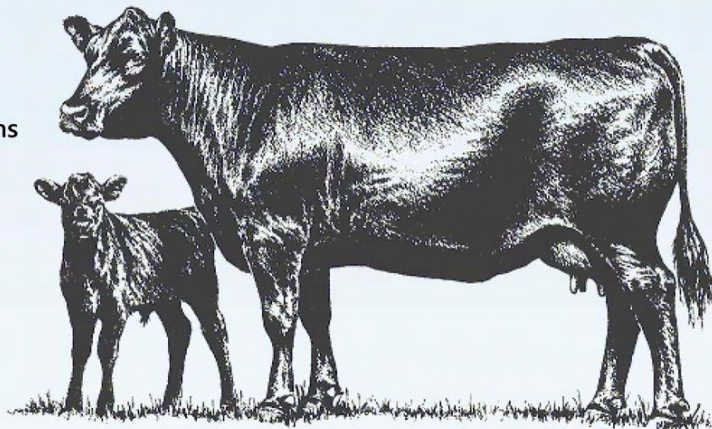
1261 Race Track Road, Alexandria, KY 41001

Meal: 6:00 p.m.

- Roast Beef, Mashed Potatoes, Green Beans, Salad and Dessert.
- Call 859-572-2600 with meal reservations by noon on Monday, November 7th.

Program: 6:30 p.m.

- CCCA Annual Business Meeting
- Animal Nutrition & Mineral Options
- Cattle Industry and Market Update
- KY Cattlemen's Assoc. & Beef Council
- Extension Update



Speakers:

- **Ty McGuire**, VitaFerm
- **Rick Schweitzer**, S & B Cattle Company
- **Michelle Simon**, Campbell County Extension Agent for Agriculture and Natural Resources

Please pay your 2023 KY Cattle Association and CCCA dues (\$30) online at kycattle.org



Sponsored by:

Campbell County Cattle Association | VitaFerm | Campbell County Extension Service
University of Kentucky College of Agriculture, Food and Environment

**Call the Extension Office to register 859-572-2600
or online at: <https://campbell.ca.uky.edu/>**

Cooperative Extension Service
Agriculture and Natural Resources
Family and Consumer Sciences
4-H Youth Development
Community and Economic Development

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, or physical or mental disability. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating. LEXINGTON, KY 40546





University of Kentucky
College of Agriculture,
Food and Environment
Cooperative Extension Service

Free Compost Bin & Demonstration



**November 18
12pm -OR- 1pm**

- Educational session on how to use a compost bin
- New participants only
- 1 compost bin per residence
- Open to Campbell County residents only

Composting is a great way to dispose of fall leaves and holiday leftovers!

PICKUP LOCATION:

Campbell County Cooperative Extension Office
3500 Alexandria Pike | Highland Heights, KY
41076

REGISTRATION IS REQUIRED TO RECEIVE A COMPOST BIN

Register at 859-572-2600

Cooperative Extension Service
Agriculture and Natural Resources
Family and Consumer Sciences
4-H Youth Development
Community and Economic Development

Educational programs of Kentucky Cooperative Extension serve all people regardless of race, color, age, sex, religion, disability, or national origin. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating.
LEXINGTON, KY 40546



Disabilities accommodated with prior notification.

CAMPBELL COUNTY

FARMERS MARKET

2022

UK University of Kentucky
College of Agriculture,
Food and Environment
Cooperative Extension Service

Large variety of home grown produce, breads, honey and other KY Proud commodities. For more information, call 859-572-2600.



Campbell County Farmers Market

Highland Heights*— Tuesdays

Senior Citizens Activity Center
3504 Alexandria Pike
May 17 thru October 25
3:00 p.m. to 6:00 p.m.

Fort Thomas**— Wednesdays

Mess Hall in Tower Park
801 Cochran Avenue
March 23 thru December 14
3:00 p.m. to 6:00 p.m.
Hours extend to 7:00 p.m. June-September
(Senior shopping begins at 2:45 p.m.)

Alexandria*— Fridays

Southern Lanes Sports Center
7634 Alexandria Pike
May 20 thru October 28
3:00 p.m. to 6:00 p.m.

Newport*— Saturdays

Next to Pepper Pod Restaurant
709 Monmouth Street
May 21 thru October 29
9:00 a.m. to 12 noon

- * Accepts WIC, SNAP and Senior Farmer's Market Nutrition Program
- ** Accepts SNAP only Supplemental Nutrition Assistance Program

Cooperative Extension Service
Agriculture and Natural Resources
Family and Consumer Sciences
4-H Youth Development
Community and Economic Development

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, or physical or mental disability. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating. LEXINGTON, KY 40546





University of Kentucky
College of Agriculture,
Food and Environment
Cooperative Extension Service

NIGHT HIKE

DEC. 2ND, 6:00PM
DEC. 16TH, 6:00PM



**CAMPBELL COUNTY
ENVIRONMENTAL
EDUCATION CENTER**

**1261 RACE TRACK RD.
ALEXANDRIA, KY
41001**

**Registration is required. Please call (859) 694-1666 / (859) 572-2600
or visit <http://campbell.ca.uky.edu/> to register**

Cooperative Extension Service
Agriculture and Natural Resources
Family and Consumer Sciences
4-H Youth Development
Community and Economic Development

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, or physical or mental disability. University of Kentucky, Kentucky State University, U.S. Department of Agriculture, and Kentucky Counties, Cooperating.
LEXINGTON, KY 40546



Disabilities
accommodated
with prior notification.