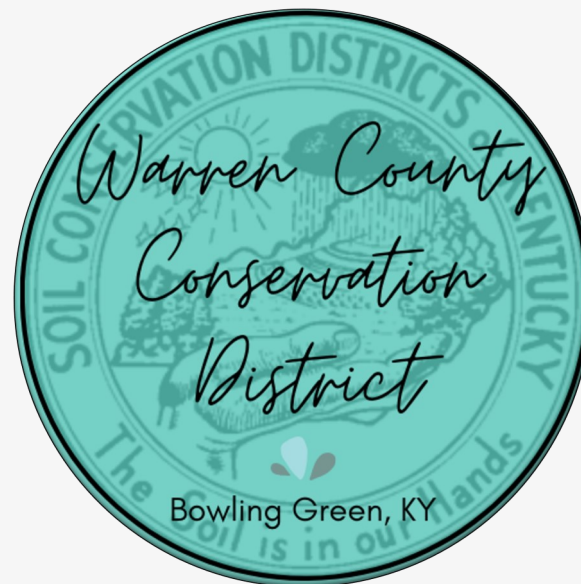


WCCD's Backyard Conservation Program

-Specification Sheets-

Please take a look at the requirements and guidance for the eligible practice you are interested in!



Insect Hotels

Insect hotels are the bird houses of the insect world.

In the wild, solitary insect species, like wood-boring beetles and solitary bees, search for cavities in wood to lay eggs. These cavities are typically left by burrowing beetles, woodpeckers, or the tree's own natural growth. Some species, like carpenter bees, will chew their way through wood to make a nesting cavity. Insect hotels are simply man-made replicas of the natural habitats these organisms search for in the wild.



Creating an insect hotel on your own is an easy way to add a creative and functional feature to your garden or landscape. The most important feature of the hotel should be to keep it as natural as possible. A wooden frame can be filled with natural materials for nesting sites. The following table breaks down which insects and other invertebrates can be expected to utilize each type of material.

University of Michigan-Dearborn. *Insect Hotels*. <https://umdearborn.edu/casl/centers-institutes/environmental-interpretive-center/education-programs/pollination-project/insect-hotels>

- *When is this in season?* Build anytime.

- *Are there location limits?* Yes, refer to publications.

- *To receive cost share for this project you may purchase a pre-built hotel or use one of the following hotel designs:*

<https://pollinators.msu.edu/publications/building-and-managing-bee-hotels-for-wild-bees/>

<https://umich.app.box.com/s/lwkvhtbr06ygni1ngoesa4e0r57eeojt>

<https://umich.app.box.com/s/dpvbmntkknkplv39w1xsadob7qqub3nk>

<https://umich.app.box.com/s/gb344ayijcdzm7dx2f2fpdlldaz6nfor70>

Native Tree Planting

Trees in your backyard can be home to many different types of wildlife. Trees can also reduce your heating and cooling costs, help clean the air, add beauty and color, provide shelter from the wind and the sun, and add value to your home.

Natural Resources Conservation Service. *Tree Planting*. https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/newsroom/features/?cid=nrcs143_023591



- *When is this in season?* Plant trees November—February. If you plant March—April, extra watering is required.

- *Are there location limits?* Yes, refer to Mississippian Plateaus Region: <https://www.uky.edu/hort/sites/www.uky.edu/hort/files/pages-attachments/planttable2.PDF>

- *To receive cost share for this project you must purchase native trees to our area and follow the native tree and planting guidelines:*

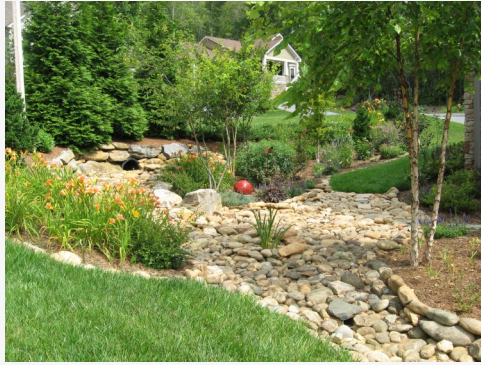
Tree Species List: <https://www.uky.edu/hort/Native-Trees-of-Kentucky>

Choosing a tree, placement, planting, and maintenance: https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/newsroom/features/?cid=nrcs143_023591

Tree planting tips: <https://eec.ky.gov/Natural-Resources/Forestry/urban-forestry-and-community-programs/Pages/Tree-Planting-Tips.aspx>

Rain Garden

Rain gardens can remove standing water in your yard, reduce mosquito breeding, filter runoff pollution, and conserve water. They also create an environment that supports an increase of beneficial insects that can eliminate pest insects.



Rain gardens are particularly important in urban areas because developed land (pavement, buildings, and compacted soils) increases stormwater runoff. Rain gardens are one of several stormwater management practices that homeowners can use to reduce their property's negative impact on water quality and flooding. "Residential Rain Gardens." www.ca.uky.edu

- *When is this in season?* Build anytime weather allows.
- *Are there location limits?* Yes, ideally a rain garden will be constructed where runoff from various sources collect in your yard.
- *To receive cost share for this project you must follow guidance from this publication:*
<http://www2.ca.uky.edu/agcomm/pubs/HENV/HENV205/HENV205.pdf>

Raised Garden Beds

Raised beds are great for growing small plots of vegetables or flowers. They prevent soil compaction, provide good drainage, and serve as a barrier to pests and pathway weeds.



Gardening in containers or raised beds can be just the answer gardeners who would like to grow their own vegetables and flowers, but lack the space or physical ability for a traditional garden. Raised beds can be used to overcome poor soil conditions and bring the garden to an easier to reach height. Lerner, B. R. (2009, April). Container and Raised Bed Gardening. Retrieved 2021, from <https://ag.purdue.edu/hla/pubs/HO/HO-200.pdf>

- *When is this in season?* Build anytime weather allows.
- *Are there location limits?* Yes, a vegetable garden should be allowed full sun.
- *To receive cost share for this project you may purchase raised bed containers or construct beds based on guidance from these publication:*
<http://www2.ca.uky.edu/agcomm/pubs/ID/ID248/ID248.pdf>
<https://www.aces.edu/blog/topics/lawn-garden/raised-bed-gardening/>

Vegetable Gardening Guide: https://grayson.ca.uky.edu/files/id-128_home_vegetable_gardening_in_ky.pdf

Pollinator Oasis

Support pollinators by supplying shelter, food, and a water source to attract them to a specific area. Regardless of their size, a pollinator oasis will impact our crops and assist with fruit and vegetable production.



- *When is this in season?* Plant April 15-June 30.
- *Are there location limits?* Yes, follow planting requirements for pollinator mixes.
- *To receive cost share for this project you may purchase a pollinator friendly mix from Lowe's, Roundstone, Ironweed Native Plant Nursery, etc. and create an oasis based on guidance from these publications:*

How to create a bee sanctuary: <https://davidsuzuki.org/wp-content/uploads/2018/05/BIMBY-wild-bee-sanctuary-background.pdf>

<https://davidsuzuki.org/queen-of-green/how-to-grow-a-wild-bee-sanctuary/>

Native plants to KY: <http://www2.ca.uky.edu/agcomm/pubs/for/for71/for71.pdf>

Honeybees

Beekeeping is a rewarding hobby that encourages the care of pollinators. Bees are a valuable animal and resource that pollinates many of our crops. Bee keeping is one way to aid in the health and sustainability of honey bees.



If you are just beginning, please read the below publications before choosing to move forward. Bee keeping is rewarding; however, there are many aspects and requirements to doing it properly.

- *When is this in season?* Purchase bees March-April
- *Are there location limits?* Yes, follow location guidelines in the below publications.
- *To receive cost share for this project you must show proof of purchased hive boxes and frames, personal protection equipment, hive tools and that tools for your toolbox (pg. 10 of Hive BMPs pdf), and show proof of Warren County Beekeepers enrollment and mentor, and follow guidance from these publications:*
https://honeybeehealthcoalition.org/wp-content/uploads/2019/01/HBHC_Hive_BMPs_v1.0_reduced.pdf
<http://www2.ca.uky.edu/agcomm/pubs/ent/ent41/ent41.pdf>

To join the Warren County Beekeepers contact:
warrencountykybeekeepers@gmail.com

Rain Barrels

Rain barrels are an effective way to manage stormwater runoff and reduce the amount of pollutants in waterways. This can reduce the demand on municipal water supplies by using stored water to supply gardens and lawns.



- *When is this in season?* Build anytime weather allows, utilize barrel Spring—Fall.
- *Are there location limits?* Yes, must attach to a downspout to catch rain runoff.
- *To receive cost share for this project you may purchase a rain barrel or construct one based on guidance from this publication:* <http://www2.ca.uky.edu/agcomm/pubs/henv/henv201/henv201.pdf>

Compost Bins

Compost bins can be used to decrease the amount of yard trimmings and food waste going to landfills. Compost is a soil conditioner made of decomposed organic material that improves the physical condition and fertility of soil. Using compost can improve aeration, root penetration, and water infiltration.



- *When is this in season?* Build anytime weather allows.
- *Are there location limits?* Yes, follow guidelines in below publication.
- *To receive cost share for this project you may purchase a compost bin or construct one based on guidance from these publications:* <http://www2.ca.uky.edu/agcomm/pubs/ho/ho75/ho75.pdf>; <https://www.uaex.edu/publications/pdf/FSA-6033.pdf>; <https://www.piercecountywa.org/DocumentCenter/View/1176/ThreeBinDIY?bidId=>

All about composting: http://www.rs.uky.edu/consumer/extension_pdfs/id192.pdf

Bat Houses



Did you know bats are pollinators? Not only are the pollinators, globally, bats provide vital ecosystem services in the form of insect pest consumption, plant pollination, and seed dispersal, making them essential to the health of global ecosystems.

batcon.org

Scientists estimate that insect-eating, or insectivorous, bats may save U.S. farmers roughly \$23 billion each year by reducing crop damage and limiting the need for pesticides. *batcon.org*

- *When is this in season?* Build anytime weather allows, put up according to publication below.

- *Are there location limits?* Yes, refer to below publication's mounting recommendations.

- *To receive cost share for bat boxes you may purchase premade ones that are 24"x16" with no mesh or fabric or build on based on guidance from this publication:* <https://www.batcon.org/wp-content/uploads/2020/09/4-Chamber-Nursery-House-Plans.pdf>

For more information: <https://www.batcon.org/about-bats/bat-houses/>

Purple Martin Houses

Purple Martins are a nice option for pesky flying insect control. If you'd like to add some wildlife to your backyard, consider purple martin houses!



- *When is this in season?* Put up your martin housing a few weeks before the martins are due to arrive, around March 15. <https://www.purplemartin.org/purple-martins/attracting/115/timing/>

Are there location limits? Yes, <https://www.purplemartin.org/purple-martins/attracting/114/location/>

- *To receive cost share for this project you must purchase a premade martin house, follow guidance from these publications:*

<https://www.purplemartin.org/uploads/media/housingstandardshs-254.pdf>

<https://www.purplemartin.org/purple-martins/housing-standards/60/choosing-purple-martin-housing/>

For more information: <https://www.purplemartin.org/purple-martins/2/purple-martins/>