Horticulture 2024 Newsletter No. 18 May 6, 2024

1712 Claflin, 2021 Throckmorton Plant Science Center Manhattan, KS 66506 (785) 532-6173

Video of the Week: Creating a Fairy Garden

ANNOUNCEMENTS

Do you have fairies in your garden?

Fairy gardening has been a popular trend over recent years and the sky is the limit on how it can be done. If you have a fairy or other miniature garden and you'd like to see it featured in an upcoming newsletter contact Cynthia at <u>cdom@ksu.edu</u>.

Johnson County Public Garden Tour

May 17 & 18, 2024



Access private gardens and the Garden Gallery Demonstration Garden for ideas and inspiration. Tour includes the Garden Thyme Marketplace with garden-themed décor for purchase and the Extension Expo with free resources. Support the programs and projects provided by the Extension Master Gardeners by purchasing tickets to the garden tour. View the flyer here: Johnson County Public Garden Tour or visit the website to purchase tickets. (https://www.johnson.k-state.edu/lawn-garden/public-gardentour/2024-tour.html)

2024 Kansas Turf and Ornamentals Field Day

August 1, 2024, at Rocky Ford Turfgrass Research Center in Manhattan, KS. <u>https://www.k-state.edu/turf/events/2024TurfFieldDayProgram.pdf</u>

GARDEN CALENDAR

May Garden Calendar

VEGETABLES

Protecting New Vegetable Transplants from the Wind



Wind is an important environmental feature for the plant world. Many plants rely on the wind to disperse seeds and transfer pollen from one plant to another. Young plants strengthen their stems as a result of nudging from the wind. As you move seedlings into the garden remember to harden them off by exposing them to the elements gradually. Without preparing the plants for the wind through increased exposure they are more susceptible to breaking under this force. In small scale gardens, you can also create a wind break to further protect young transplants from the wind, but this is not practical on a large scale.

Soil Temperature and Warm Season Veggies

Tomatoes can be transplanted when the soil temperature is 55 degrees F. For peppers, cucumbers, melons and squash the soil should be at least 60 degrees. Our soil temperature is high enough now that it is safe to plant most warm season crops.

Remember to check out the <u>Kansas</u> <u>Mesonet</u> resource. You can access current and historic soil temperatures to help you plan your garden calendar.



PESTS

Cucumber Beetles and Bacterial Wilt



Description: Cucumber beetles can either be striped or spotted. Striped cucumber beetles are more common with ¼-inch long bodies, black head and antennae, straw-yellow thorax and yellowish wing covers. There are three parallel longitudinal black stripes down the body. Spotted cucumber beetles have 12 black spots on the wing covers with yellow on the underside of the abdomen.

Life Cycle: There are two generations of cucumber beetles each year. They overwinter as adults. After mating the females lay eggs in the soil at the base of cucurbit plants making it easy for larvae to feed on roots when they emerge. Two to three weeks later the larvae pupate in the soil giving rise to the second generation later in the growing season. It takes about four to six weeks for a single generation to go from egg to adult.

Damage: Cucurbit plants are targeted by cucumber beetles whose feeding reduces growth and can cause plant death. Young pumpkin and squash plants are common targets. Holes in leaves, stems, flower and fruits caused by feeding can affect yield. Cucumber beetles also transmit the disease, bacterial wilt, which causes sudden browning and death of cucumbers and muskmelons. Once infected the plant cannot be cured making prevention key.

Control: Protect young plants now by using row covers, cones or another physical barrier. Seal the edges of the barrier to prevent beetles from entering. Use transplants which can stand up to bacterial wilt better than seedlings. Mulch with straw around plants to create a habitat for predators such as wolf spiders. Remove crop debris after each growing season and manage weeds. Monitor plants regularly and manually

remove cucumber beetles. Sticky cards can be used to help monitor for pests present in the garden.

Insecticides with permethrin (Bonide Eight Vegetable, Fruit & Flower Concentrate and Hi Yield Garden and Farm Insect Control) can be used when pollinators are not present. Always follow all label instructions and only use insecticides in combination with proper cultural controls.

Read more at our KSRE Publication: <u>Striped and Spotted Cucumber Beetle</u>

Eastern Tent Caterpillar



Description: Native to North America, Eastern tent caterpillars are hairy and black with a white stripe down the back and yellow/brown stripes on the sides along with blue, oval-shaped spots. Caterpillars create a tent-like nest that can be a foot or more in length. Full-grown caterpillars can be 2 to 2 ½ inches long. The adult moths have reddish-brown wings with two whitish bands across the forewing. The eggs, laid in masses, are covered with a shiny, black material enclosing the eggs. Cocoons are

one-inch in length and white or yellowish in color.

Life Cycle: Caterpillars emerge in early March when buds begin to break. They create a silk tent in a tree crotch with many other caterpillars to create a colony. Mature caterpillars leave their nest to seek a safe place to pupate. About three weeks later the adult moth emerges. Upon mating, females lay masses of 150 to 400 eggs on branches to overwinter and hatch the following spring. There is one generation per year.

Damage: Caterpillars emerge from their tents when it is not too hot or raining, usually early morning and evening to feed on leaves. Defoliation may not kill trees and shrubs directly, but does put the plants under stress as photosynthesis is reduced. The silky nests in the trees are unsightly.

Control: Scout for egg masses during winter to remove and destroy. Dispose of tents as they appear in spring. Exposing young caterpillars makes them susceptible to predators such as birds though mature caterpillars are less appetizing due to the hairs present. Bt (*Bacillus thuringiensis* subsp. *kurstaki*) or Spinosad can be used to kill young caterpillars. Mature caterpillars can be treated with pyrethroid-cyhalothrin or permethrin insecticides, but be aware these will harm beneficials as well. Do not use these products when pollinators are active. When inside the tents, caterpillars are protected so insecticides applied at this time are much less effective.

MISCELLANEOUS

What to do about a hard crust layer on the soil surface



Heavy downpours of rain that some areas experienced over the past couple of weeks often lead to soil crusting. Intense rainfall can disperse soil into small particles. When the soil dries quickly it seals the particles together creating a concrete-like layer. Young seedlings struggle to break through the crust and consequently die. The crust layer also creates a problem for drainage since water is no longer able to penetrate.

To prevent soil crusting, keep the soil covered. During the off-season grow a cover crop for the nutrient benefits as well as to protect the surface from the impacts of heavy rain. Increase organic matter content and till as little as possible or not at all. Organic matter improves the texture making the soil less susceptible to crusting because the particles of soil are not easily displaced.

To remediate soil that has a crusty layer, cultivate lightly to break up the hard surface. While there is a risk of damaging existing plants if done carefully, it is much less harmful than the effects of crusted soil.

Ladybird Beetles

Adult and larvae of the ladybird beetle are beneficial insects. They feed on pests such as aphids, mealybugs, whiteflies and scale and do not harm garden plants.



The larvae may look menacing, with the orange and black markings on their bodies but they are effective at managing garden pests. They are about 3/8-inch long. Adults are typically round and ¼-inch or smaller in size. Their bodies are most often red with black spots. Adults lay yellow eggs in clusters of 10 to 20 on plant leaves.

You can invite beneficial insects, and pollinators, into your landscape by incorporating their preferred plants. Here are some to consider:

- Queen Anne's lace (Daucus carota)
- Common yarrow (Achillea millefolium)
- Sweet clover (*Melilotus spp.*)
- Sweet alyssum (Lobularia maritima)
- Dill (Anethum graveolens)
- Fennel (*Foeniculum vulgare*)
- Coreopsis (Coreopsis spp.)
- Garlic chive (*Allium tuberosum*)
- Sage (Salvia spp.)
- Cornflower (Centaurea cyanus)



Useful Resource: K-State Extension Wildlife Management Website



May is Gardening for Wildlife month and we have a wonderful resource available through K-State Extension Wildlife Management. Find research-based information for gardening with wildlife by creating habitats to meet their needs. Check out the podcast "Fins, Fur and Feathers" hosted by Extension specialists, Drew Ricketts and Joe Gerken, YouTube guides and more at KSRE Wildlife Management.

MENTAL HEALTH MONDAY

Playing in the Garden



Who says play is only for children? In this month's Mental Health Monday, we are bringing play into the garden. Miniature gardens can be artistic and certainly creative outlets to promote play and improve life satisfaction. Read more for ideas to get started with your own miniature garden.

KSRE: Playing in the Garden

QUESTION of the WEEK



Gardening after Flooding

Is it safe to garden in an area that was previously flooded?

One major problem with gardens that have been flooded is the potential damage to the soil structure. When the soil becomes flooded water fills in the air spaces depriving plant roots of necessary oxygen. An additional concern is the risk of soil compaction further restricting oxygen to the roots. The longer the flood conditions last the more likely damage will occur. Typically, if water recedes



within 24 hours the impact on plant health is minimal. However, contaminants in the flood waters may make consumption of exposed vegetables unsafe. Here are some considerations, but follow <u>US Food and Drug Administration</u> guidelines when deciding the safety of growing edible plants in flooded areas.

If crops have not been planted determine if there is a better location to establish a garden where flooding is not a concern. Consider planting a cover crop instead to begin repairing the soil and protecting it from exposure to further compaction. Do not plant when soils are still saturated to prevent damage to the structure caused by digging, tilling and even foot traffic.

For established gardens where flooding occurs, leafy green crops and any fruit that is present should be disposed of due to the risk of contamination. Late season crops that develop after floodwaters have receded *may* be safe to eat, but the grower must evaluate the potential contaminants of the water.

With young crops it may be best to replant if symptoms of stress such as stunted growth and discoloration appear.

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The web version includes color images that illustrate subjects discussed. To subscribe to this newsletter electronically, send an e-mail message to <u>cdom@ksu.edu</u> or <u>cdipman@ksu.edu</u> listing your e-mail address in the message.

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