

# GROWING A POLLINATOR GARDEN IN A CONTAINER

You don't need a lot of space to grow flowers for pollinators. Even a small container of their favorite flowers can help. Bees, butterflies, hummingbirds – and even beetles and flies – help move pollen from one plant to another so we have food to eat, fiber for clothes, seeds to grow new plants and medicines to keep us healthy.

Youngsters of some pollinators – like caterpillars that eventually turn into beautiful butterflies – only eat the leaves of certain plants. You may know that monarch caterpillars only eat milkweed plant leaves while swallowtail caterpillars prefer parsley, dill and fennel. Try adding these to your containers or gardens.

Some pollinators make their homes in plant stems, branches and tree trunks; spending their winters here as eggs, cocoons or adults. Others fly to warmer regions for the winter. No matter how or where they spend the winter, they all need lots of food for the long journey or winter hibernation.

When they wake up or arrive here in spring they are hungry. Planting flowers with the nectar, pollen and their favorite leaves to eat from spring through fall is important. And you'll get to enjoy all the pretty flowers in your garden or containers!

**Share your project with others on social media using the hashtag #GrowSmart22**

## Here's what you need

- A container with drainage holes
  - You can purchase a container or make your own from a recycled or repurposed item like:
    - Metal or plastic coffee can
    - Nursery pot from a large perennial, tree or shrub (many garden centers set these aside to take home and reuse)
    - Old bucket
    - Tin that was once filled with cookies or other goodies
    - Fabric shopping bag
    - Other items you may find in your basement, shed or garage to convert into planters
    - Ask friends and family for old pots or items that can be turned into a planter
    - Ask an adult to punch or drill holes in the bottom for water to drain if needed
- Potting mix
- Fertilizer
- Paints or permanent markers to decorate the containers (use weather-proof, plant-safe latex or acrylic paint)
- Plants or seeds from flowers and plants pollinators prefer and those that will grow in your container

## Selecting the right plants for pollinators and container gardens

- Plants need sunlight, moisture and the right temperatures to grow
  - Evaluate the amount of sun your container will receive
  - Check the space several times a day and record if it is sunny or shady
    - Check plant tags to find plants that will grow in that amount of sunlight
      - Full-sun plants need 6-8 hours of sunlight or more
      - Part-sun plants need about 5-6 hours
      - Shade plants only need about 4 hours or less of sunlight or dappled shade throughout the day
  - Watch the weather forecast and record high and low temperatures
    - Some plants like impatiens and fuchsia need warm conditions and don't survive frost
    - Other plants like alyssum, dianthus and pansies take cool and even frosty temperatures
  - Here are just a few you can find at most garden centers:
    - Marigolds, zinnias and cosmos are easy to start from seed right in a container and like sunny spots
    - Other plants for sunny spots - sweet alyssum, pansies, dianthus, herbs, lantana, cuphea, salvia, verbena, black-eyed Susans, and many native plants
    - For shade – fuchsia, impatiens, lungwort, coral bells
- Make a list of plants that will grow in your container. Then visit the garden center to purchase seeds or plants.

## How many plants you need for a container

- 1 plant for small pots
- 3-4 plants for a 10-12 inch diameter pot
- 4-6 plants for a 14-16 inch diameter container
- 6-8 plants for a 16-20 inch diameter planter

*Remember to always check the plant tag. Some plants grow big and need more space, meaning you will need fewer plants.*

## Get started planting

1. Fill the container with potting mix, leaving a couple inches of space between the top of the soil and top of the container
2. Add fertilizer now if using a slow release fertilizer, follow the directions on the fertilizer packet
3. Set plants on the soil surface to test your design.
4. Once you have a design in mind, carefully remove the plant from its container. Squeeze the pot and slide the plant out. Don't pull on the stem or you may hurt the plant. Gently loosen the roots so they will spread out into the soil in their new pot.
5. Dig a hole big enough for the roots. Make sure the roots are covered with soil and the stem of the plant is above the ground. You may need to add or remove soil in your container to do this.
6. Water your newly planted pot and set it in its permanent spot.
7. Feed your plants with your favorite fertilizer following the label direction if you did not do this already. Fast release fertilizers need to be added regularly throughout the summer.
8. Check the soil in your container every day. Just stick your finger down an inch or two and water long enough for the excess water to run out the drainage holes.
9. Then watch for the pollinators to stop by for a sip of nectar. Take photos or draw pictures of your container garden and the visitors. [Share these with others on social media, using the hashtag #GrowSmart22.](#)



# GROWING A POLLINATOR GARDEN IN A CONTAINER

## Doing and Learning More

### You're the scientist (youth with the help of an older sibling or adult)

- Draw or take pictures of the plants and your container garden
- Write the names of the plants on the picture or a separate piece of paper
- Water the plants (a favorite kid activity)
  - Discuss when to water and how much water the container needed
  - Check the soil first by sticking your finger into the soil. Does it feel dry or wet?
- Watch for insects and hummingbirds visiting the plants
  - Count and write down how many you see
  - Can you find their names in books or by asking gardeners you know?

### You're the engineer (teens and tweens)

- Monitor the growing conditions to determine where to place your pollinator container
  - Find the average date of the last spring frost in your area
  - Record high and low temperatures
    - A high-low thermometer or a nearby weather station can help
  - Evaluate the amount of sunlight various parts of your yard, patio or balcony receive
  - Select the best location for the plants you want to grow
- Create a container from a weather-proof found item (no paper containers, please)
  - Determine if drainage holes are needed and how you will add these
    - Drill, punch with a hot skewer for plastic item, or use other methods to add drainage holes. Ask an adult for help as needed.
  - Measure the diameter of your container
  - Calculate and record the number of plants needed
    - Use the pot size and mature plant size (see the plant tag or seed packet) of plants you selected
- Record how often you watered your container throughout the season
  - Record rainfall throughout the season
    - Make a rain gauge to capture and record rainfall
  - How did the watering amount and frequency change as the plants grew bigger?
  - How did the watering amount and frequency change when the weather was hotter or colder?
  - How could you reduce the time spent watering?
    - Use a larger container
    - Add watering devices like a Plant Nanny or watering globes
    - Include an organic sustainable amendment like Wild Valley Wool Pellets to reduce watering frequency
    - Create a DIY irrigation or self-watering system for the container garden
  - Organize the information in a chart or spread sheet
    - Use this to help with future pollinator plantings



# GROWING A POLLINATOR GARDEN IN A CONTAINER

## Doing and Learning More

### You're the plant scientist and data collector (teens and tweens)

- Measure and record this data throughout the season
  - Plant growth
    - Date sprouted
    - Weekly increase in height
    - Date it began flowering
  - Rainfall
    - Make your own or buy a rain gauge
  - Temperature
    - Use an outdoor thermometer, weather reports or information from a nearby weather station
- Chart or place information on a spreadsheet
  - Do you find any relationship between rain, temperature and plant growth?
- Observe and record pollinators visiting the container garden
  - Who is visiting and what flowers are the most visited?
  - What, if any, caterpillars are eating the leaves?
  - No visitors? Why could that be?
  - Organize the information in a chart or spread sheet
    - Use this to help with future pollinator plantings

