Become a SEED Explorer at Home

Challenge 1:
Learn the Story of Wing Haven

Challenge 2:
Go Outside and Explore

Challenge 3:
Investigate the Plants We Eat

Challenge 4:
Get to Know Bugs

Challenge 5:
Practice Bird Watching

What is SEED?

Student Environmental Education and Discovery

Not just the name of Wing Haven's hands-on children's exploration garden, but also a guiding principle for how we can all become better stewards of the natural world.

Photo Credit: Amelia Winchester Photography
Let’s start at the beginning:
In 1927, Eddie and Elizabeth Clarkson moved into a house on 248 Ridgewood Avenue in Charlotte, NC. They started a garden, but not just any garden - a garden for the birds.

**Take a virtual tour** of Wing Haven Garden and Bird Sanctuary to experience Eddie and Elizabeth Clarkson’s historic three-and-a-half-acre garden for the birds.

**Did you know?** Wing Haven is now comprised of three gardens, all on Ridgewood Avenue: Wing Haven Garden and Bird Sanctuary, the Elizabeth Lawrence House and Garden, and the SEED Wildlife and Children’s Garden.

Photo Credit: Amelia Winchester Photography
Challenge 2:
Go Outside and Explore

Take a nature walk outside!
Try to find all of these things:

- A four-legged animal
- A tree with flowers
- A rock with an unusual shape
- A fallen leaf
- A bird
  (Do you know what kind it is?)

- A flying insect
- A pinecone or acorn
- A fallen leaf
- A bush as tall as you
- A plant not colored green
Think about the foods you eat that grow from the earth - fruits, vegetables, and even grains like oats or rice! So much of what we eat started in the soil as a plant - let’s investigate how it works.

1) **Match the following foods to the plant part that the food represents.** Can you match them all?

<table>
<thead>
<tr>
<th>Roots</th>
<th>Stem</th>
<th>Leaves</th>
<th>Flower</th>
<th>Fruit</th>
<th>Seeds</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Peas</td>
<td>B. Carrots</td>
<td>C. Broccoli</td>
<td>D. Asparagus</td>
<td>E. Cabbage</td>
<td>F. Tomato</td>
</tr>
</tbody>
</table>

*Answers: A. Seeds; B. Roots; C. Flowers; D. Stem; E. Leaves; F. Fruit*
2) **Make a list of the plants that your family likes to eat.**
Maybe your family loves tomato sandwiches, potatoes and onions cooked in a soup, or tacos with chilies and beans. Do some research to figure out which part of the plant you are eating for each of the plants in your favorite dishes: the root, the stem, the leaves, the flowers, the fruits, or the seeds?

3) **Try your hand at growing an edible plant!** Here are a few ideas:

**A. Sprout a Dry Bean Seed**

*Supplies:*
- Bag of Dry Beans (lima beans work great)
- Cotton Balls or Paper Towels
- Glass jar or drinking glass (or clear plastic zip-top bag)

*Instructions:* Moisten a handful of cotton balls or paper towels with water and put into the jar, glass, or zip-top bag. Wedge a few beans between the cotton balls or towels and the wall of the jar, glass, or bag so that you can observe the sprouting process. Keep in a sunny window and keep moist. Watch to see if the bean sprouts over the next week (some dry beans sold for eating may not sprout due to age or presale treatment). If desired, plant sprouted beans outside just under the soil surface in a sunny spot to watch the beanstalks grow.


**B. Grow a Sweet Potato Vine**

*Supplies:*
- A sweet potato
- A cup of water
- Four toothpicks

*Instructions:* Use the toothpicks to prop a sweet potato in a cup of water so that it is partially submerged with ⅓ of the sweet potato above the water. The root end of the sweet potato should point down into the water (the root end is the more pointed end and sometimes has thin, fibrous roots attached). Vines should begin to sprout in about 2 weeks. If desired, plant in a sunny spot with the vines above the surface of the soil in May for a fall sweet potato harvest.

*Image Source:* [https://web.extension.illinois.edu/gpe/case5/c5hqi.html](https://web.extension.illinois.edu/gpe/case5/c5hqi.html)
1) Go on a Bug Hunt outside to look for bugs. If you find one, see if you can tell whether it is an insect.

*Hint: Insects have six legs, and usually fly. Common insects include bees, flies, and ants.*

**Tips for a Safe, Fun Bug Walk:**

- Some bugs protect themselves from harm by biting or stinging. If you aren’t sure that a bug is safe to hold, then don’t touch it.
- Bugs like to hide where they can find food and feel safe. Try looking on logs, near plants, or under rocks to find bugs.

**Challenge 4: Get to Know Bugs**

### 2) Build a Bug House!

Every ecosystem needs bugs to feed the birds and other wildlife, control mosquito and other invertebrate populations, and pollinate flowers. We can provide bugs with needed shelter by building brush piles, large or small, outside. Instead of a typical, large brush pile, try making a miniature brush pile - a “Bug House!”

**Instructions:**

1. Gather a handful of small twigs from the ground.
2. Arrange these twigs in one layer to make a foundation for the house.
3. Build a “house” on your foundation using leaves, rocks, pinecones, more twigs, or other natural materials. Be sure to provide lots of nooks and crannies for bugs to hide in!

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All bugs play an important role in the ecosystem, no matter how small they are. No squishing or stepping on bugs, please!

1) Learn some common bird species. Click on the species name under each photo to access facts about each species from the Cornell Lab of Ornithology’s All About Birds online bird guide.

Northern Cardinal
Bright red feathers; Crested Head

American Robin
Long yellow beak; Grey back; Orange belly

Eastern Bluebird
Blue back, Orange chest, White belly

Carolina Wren
Brown back, White eyebrow stripe, Long beak

2) Find a bird watching site. You can bird watch at a local park, a backyard, or even from an outside-facing window at home. You are most likely to see birds where their habitat needs - food, water, and shelter - are provided for with things like trees, bugs, and running water. Remember, though, birds can truly be anywhere. Wherever you are can be a bird watching site!
3) **Bird watch at your site for at least 20 minutes at a time.** Use the tally sheet provided on this page to keep track of the birds that you see. Return each day to see which birds call your site home!

<table>
<thead>
<tr>
<th>Type of Bird</th>
<th>Tally of # Spotted Eating</th>
<th>Tally of # Spotted Hiding</th>
<th>Tally of # Spotted Flying</th>
<th>Total Number Spotted</th>
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<tbody>
<tr>
<td>Northern Cardinal</td>
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*Use a birding field guide or the Cornell Lab of Ornithology’s [online bird guide](https://www.allaboutbirds.org/) to identify unknown species and write them into your tally sheet.*