

Discovery Tour Packet First Grade Teacher's Guide

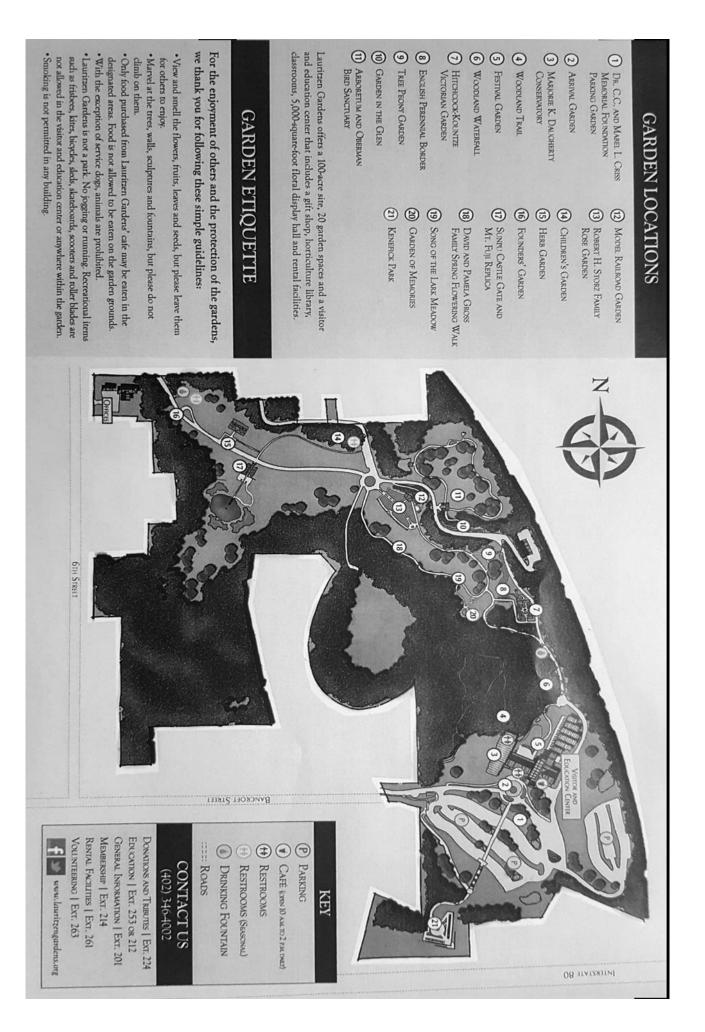
Welcome to Lauritzen Gardens!

We are providing this guide to assist you and your students in learning about nature and the various gardens within our 100-acre property. This guide includes suggested stops and activities in addition to general garden information.

Please note that you will likely not be able to visit all areas of the Garden during your visit.



Scan or click here <u>https://www.youtube.com/watch?v</u> <u>=UIwypYakqx4</u> for a brief introduction to Lauritzen Gardens.



You will enter the main Gardens through the Visitor and Education Center. It is recommended that you make brief stops at points that interest your group, but proceed to one of the highlighted gardens for your first activity.

If you are visiting with multiple groups, please consider beginning your tour farther out in the Gardens to avoid congestion.

Discovery tours do not include visiting the Conservatory, the Woodland Trail or the Visitor and Education Center

Nebraska State Standards covered in this packet:

MA 1.3.1 Characteristics: Students will identify and describe geometric characteristics and create two- and three dimensional shapes.

SC.1.6.2.A Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.

SC.1.6.2.D Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.

Iowa State Standards covered in this packet:

1-LS 1-1. Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs.

1-LS 3-1. Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents.

Pre- and Post-Field Trip Activities

Pre-

- Discuss with students a brief preview of your field trip.
- Have them draw or write on page 1 in order to answer the questions within that page.
- Discuss as a group when finished.

Post-

- Complete the brief reflection page.
- Discuss when finished.

On page 4 of the student handbook, there is a scientific drawing page that students may complete at any point during your tour. Be on the lookout for a pond and their favorite flowers.

Review the steps and requirements of a scientific drawing.







Woodland Waterfall (#6)

- Notice the animal burrows in the Loess Hill soil to the left of the pathway just prior to the waterfall
- Take the opportunity to identify some of earth's materials (soil, water, wood chips, rocks)



- Note living and non-living things in this location
 - o Living: Trees, plants, any animals that may be present
 - Non-Living: 'New Friends' statue, water, rocks, bench

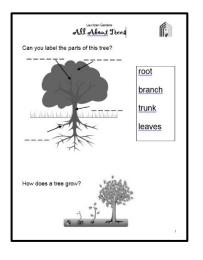
Garden in the Glen (#10)

- A 'glen' is a valley between two hills
- The glen is lined with black locust trees which provide shade for the shade-loving plants that thrive in this garden



All About Trees Activity in Student Handout

Identify the parts of a tree with your students and discuss how trees grow from nuts or seeds into mature trees. Students can complete page 2 of the Student Handout. Also discuss how young trees are similar to, but not exactly like, mature trees.



References and Notes

Deer Ears:

Gather students on the path across from the waterfall. Have them make cups with their hands and place their cupped hands behind their ears to listen to the water. Experiment by having students change the position of their hands; does the volume of the sound change?

Model Railroad Garden (#12)

- Showcases several Gscale model trains
- Buildings are replicas of historically and culturally significant Omaha buildings
- Buildings, bridges and trestles are constructed using all natural materials (seedpods, twigs, pinecones, bark, bamboo, etc.)



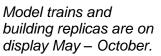
<u>Model Railroad Garden Scavenger Hunt in</u> <u>Student Handout</u> Have students observe the various 2D and 3D shapes within the Model Railroad Garden and have students complete the activity on page 2 of the Student Handout.

Arboretum (#11)

- 'Arboretum' means garden for trees
- Bronze sculpture of Sandhill crane; Sandhill cranes are migratory birds that gather along Nebraska's Platte River every spring to rest before traveling north to Canada



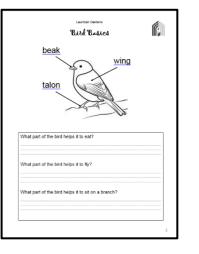
The Arboretum also serves as a bird sanctuary; look for <u>cardinals</u>, <u>chickadees</u>, <u>robins</u>, and <u>goldfinches</u>.







<u>Bird Basics Activity in Student Handout</u> Have students observe birds in the arboretum beyond the pond area. Discuss the parts of a bird and have students complete the activity on page 3 of the Student Handout.



Children's Garden (#14)

 This garden, when in season, contains many different features for the senses



- Smell' garden
 features both lemon balm and mint
- 'Taste' garden contains nasturtium, chocolate mint, chives, stevia, basil (Genovese and lemon) and cherry tomato
- 'Touch' garden features sensitive plant, lamb's ear, fennel, junkus and daylilies
- While discovering the softness of the lamb's ear plant in the 'Touch' garden, discuss how plants use their external parts to help them survive and grow where they live. The lamb's ear's fuzzy leaves deflect wind, thereby reducing water loss from the plant. These same fuzzy leaves help to channel water. Lamb's ear also has light-colored leaves which reflect the sun's rays and help to modify temperatures.



You may find more information about composting here:



- Take a few minutes to notice the garden sculptures (dragon, water feature, wooden benches, etc.)
 - Students can 'compare' themselves to these garden features for height, size and estimated weight; i.e. which is taller? shorter? wider? heavier?
 - Students can also use the length of the Student Handout to "measure" objects in the garden (benches, plants, etc.)
- This is a good opportunity to discuss with students recycling, repurposing and re-using

- Composting: There are 2 bins where garden waste is placed to breakdown into compost; compost is later used to fertilize plants in the garden
- Repurposing: The dragon sculpture was created from used farm equipment parts
- The wood mulch pathways are made from downed or damaged trees that have been chipped

Rose Garden (#13)

- This formal garden is planted with almost 2,000 rose plants including hybrid tea, grandiflora, floribunda, climbing and shrub roses
- There are two peak blooming seasons for the rose garden: late May and mid-September through frost



- Roses smell sweet to attract pollinators; roses have thorns to protect themselves from predators
- The central sculpture in the Rose Garden is an armillary sphere
 - The ancient Greeks are credited with inventing the armillary sphere, sometimes also known as the equatorial sundial; the armillary has adapted to reflect measuring time by shadows
 - o Today garden armillary spheres are also known as "shadow clocks"
 - As the sun travels across the sky, the central arrow (or gnomon) of our armillary sundial casts a shadow onto a surface that indicates the hour.

Thank you for visiting Lauritzen Gardens!

Restroom facilities and drinking fountains are located in the southwest corner of the Visitor and Education Center.