

Discovery Tour Packet Fourth Grade Teacher's Guide

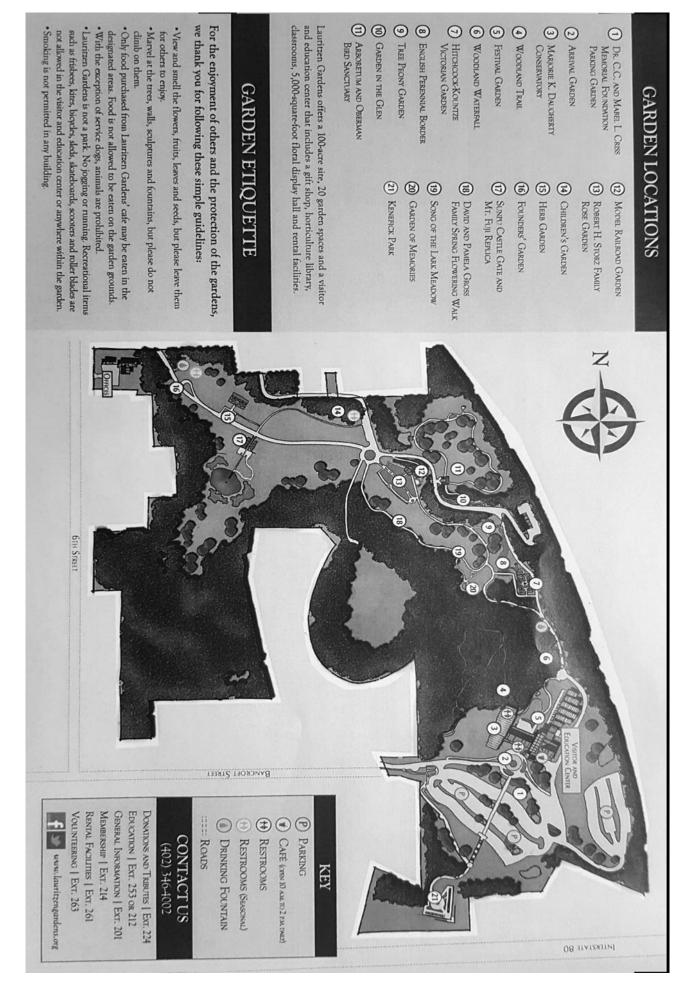
Welcome to Lauritzen Gardens!

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>=UlwypYakqx4</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 found in this packet:

SC.4.6.3.B Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

SC.4.13.4.B Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.

Iowa State Standards found in this packet:

4–LS1–1

Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.

4–ESS2–1

Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation.

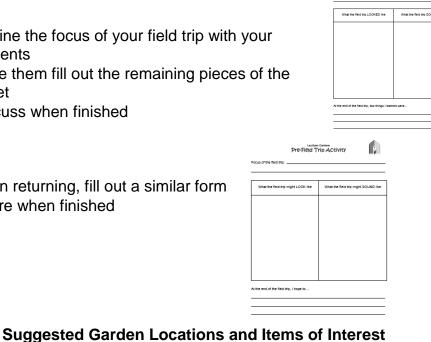
Pre- and Post-Field Trip Activities:

Pre-

- Outline the focus of your field trip with your students
- Have them fill out the remaining pieces of the sheet
- Discuss when finished •

Post-

- Upon returning, fill out a similar form •
- Share when finished •



Post-Field Trip Activity

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References and Notes

To view a video about erosion scan here:

Woodland Waterfall (#6)

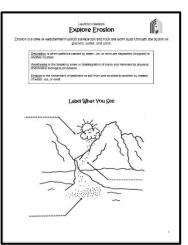
- Notice the animal burrows in the Loess Hill soil to the left of the pathway just prior to the waterfall
- Take the opportunity to identify the effects of erosion above the waterfall, across the road and down the hill





To view a video about annual and perennial flowers scan here:

<u>Explore Erosion Activity</u> <u>in Student Handout</u> The effects of erosion and weathering are apparent at the Woodland Waterfall. Discuss weathering, erosion and deposition. Have students complete the activity on page 1 of the Student Handout.



Victorian Garden (#7)

- Formal garden designed with lots of textures and shapes
- Middle rectangular beds are planted with annuals (plants that live only one year)
- Perimeter beds are perennial plants (plants that return year after year)
- Statues and architectural elements in this garden were salvaged from historical buildings in Omaha and Council Bluffs and demonstrate how we 're-use' and 'recycle' in our garden

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>.
- Continue following the path to the left to discover the Marsh Pond









Goldfinch Video and Song

<u>Bird Beak Activity</u> <u>in Student Handout</u> Discuss with students how bird beaks are adapted to a specific diet. Have students complete the activity on page 2 of the Student Handout.



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.)



Bird Beak Adaptations

Model trains and building replicas are on display May – October.

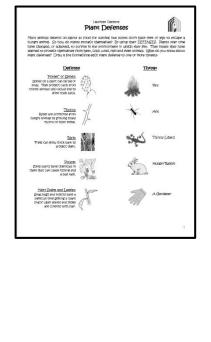
Rose Garden (#13)

- 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
 - \circ $\;$ 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

<u>Plant Defenses Activity in Student Handout</u> All of the roses in the Rose Garden have thorns; some have more than others. This is a great segue to discussing how plants defend themselves. Have students complete the activity on page 3 of the Student Handout.



Thank you for visiting Lauritzen Gardens!

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