

Discovery Tour Packet Seventh Grade Teacher's Guide

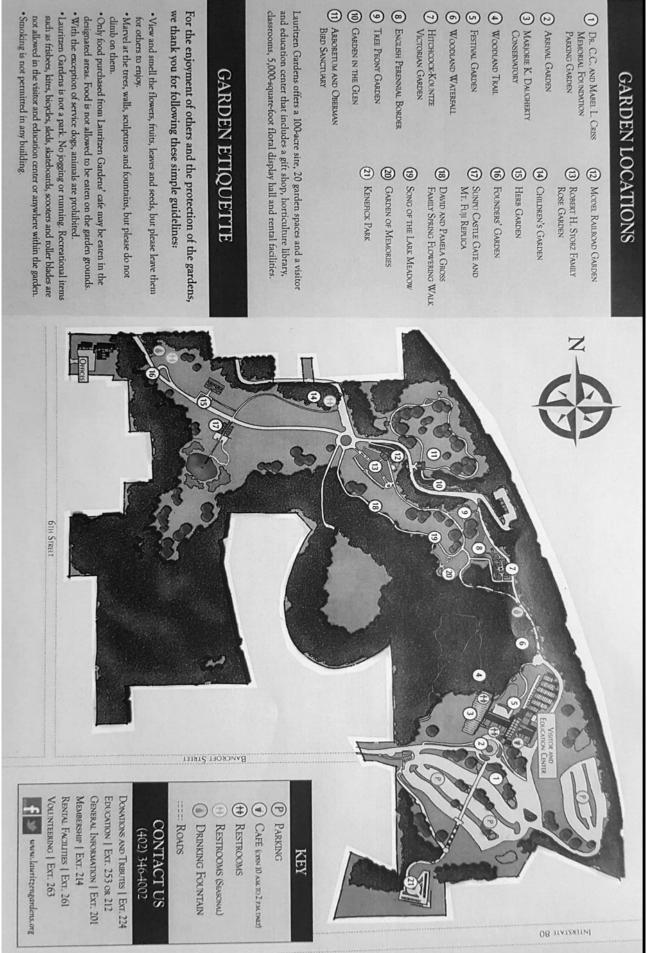
Welcome to Lauritzen Gardens!

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 covered in this packet:

SC.7.7.3.A Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.

SC.7.8.4.A Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms.

SC.7.8.4.D Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.

Iowa State Standards covered in this packet:

MS-LS1-6

Construct a scientific explanation based on evidence for the role of photosynthesis in the cycling of matter and flow of energy into and out of organisms.

MS-LS2-3

Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.

Suggested Garden Locations and Items of Interest

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 and across the road and down the hill



State Standard References and Notes

<u>NE:</u> SC 8.4.2

To view a video about erosion, scan here:



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

Victorian Garden (#7) (continued)

Photosynthesis Activity

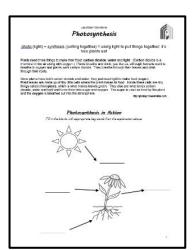
in Student Handout

Take the opportunity to explore the various plants and flowers in the Victorian Garden. This garden provides an excellent opportunity to discuss plant cells and the photosynthesis process.

Page 1 of the Student Handout provides a brief description of photosynthesis and provides students an opportunity to identify the various elements of the process. A critical thinking activity is provided on page 2. <u>NE:</u> SC 8.4.3 <u>IA:</u> MS-LA1-6

To view a video about plant cells and photosynthesis, scan here:

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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.



<u>NE:</u> SC 8.3.3 <u>IA:</u> MS-LS2-2,



MS-LS2-3, MS-LS2-4

Arboretum (#11) (continued)

<u>Habitat Ecosystem</u>

in Student Handout After visiting the Arboretum Marsh, discuss the components of an ecosystem. Explore biotic and abiotic factors in a marsh ecosystem and each affects the entire ecosystem. Students may then complete the activity on page 3 of the Student Handout.

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To learn more about life in a marsh scan here:



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.)



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

Children's Garden (#14)

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



- o 'Smell' garden features both lemon balm and mint
- 'Taste' garden contains nasturtium, chocolate mint, chives, stevia, basil (Genovese and lemon) and cherry tomato

Children's Garden (#14) (continued)

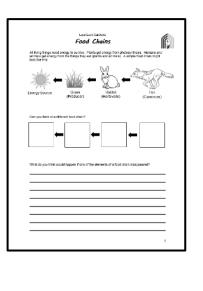
<u>NE:</u> SC 8.3.3 <u>IA:</u> MS-LS2-2, MS-LS2-3, MS-LS2-4

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- 'Touch' garden features sensitive plant, lamb's ear, fennel, junkus and daylilies
- The Children's Garden also features various plants and vegetables typically planted in a home garden. Take the opportunity to explore these different gardens and prompt students to discuss their knowledge of food sources.

<u>Food Chain Activity</u> <u>in Student Handout</u> Discuss simple food chains utilizing the example on page 4 of the Student Handout. Have students complete their own example of a food chain and

complete the critical thinking activity.



Thank you for visiting Lauritzen Gardens!

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