

Third Grade Education Program



Third Grade Program Overview

Maximum number of Students: 60

Students are divided into 3 groups of 20 students.

Each section of the program is approximately 40 minutes each. Please allow for travel time between segments.

- ✿ “How Birds Make a Living”: hands on experiment
- ✿ “A Dream Come True”: history tour, natural interpretation
- ✿ “Tree Friend”: hands on leaf ID art project.

Students will spend approximately 30 minutes in each section before moving on to the next part of the learning session. Students rotate through each section until all are completed.

Duties & To Do:

Please check-in at the prep-area when you first arrive. Remember to record your hours in the volunteer log book inside the giftshop.

Lead Volunteer

Arrive no less than 30 minutes before the start time of the session.

Check room set up for How Birds Make a Living

Check cart supplies for Tree Friend

Greet education volunteers upon their arrival.

Coordinate session, “who’s doing what” and the timing of each part.

Upon students’ arrival, take check from teacher and give to giftshop. Giftshop volunteer will cut receipt to give to teacher.

Make sure groups are divided appropriately and assign groups to volunteer.

WELCOME THE STUDENTS and then turn program to education volunteers

If inclement weather, call (608) 290-2259 to verify status of event. If cancelled, call other volunteers for the day to relay information; inform scheduled school as well.

Education Volunteers

Arrive no less than 15 minutes before the start of the session

Check-in with lead volunteer to coordinate session.

Check on the materials in your portion of the program (if applicable)

If problems arise during the program, defer to the lead volunteer if necessary.

“A Dream Come True”

The History of Rotary Gardens

Third Grade Tour

Begin the tour in the Parker Education Building with the photo display on the west wall of the reception room.

I'm going to tell you the story of how the Rotary Gardens began. We will learn about how the gardens were constructed and then take our tour through the gardens. Many of the things you see in the photos, you will recognize on our walk. If you listen carefully, someday you can bring your families back to see the gardens and you can be the tour guide.

Photo #1 History of Rotary Gardens 1914-1988

The land that is now called Rotary Gardens has had many uses. It was first used by Native Americans aka Indians and then settlers in the 1830s. In 1914 the Wilson Sand and Gravel Company started an office out of the building that we call the Rath Environmental Center.(See photo) Besides mining the quarries for sand and gravel, cement hitching posts were constructed. You can see many of the in front of some of Janesville's oldest homes. There is one located in front of the Rath Center as well. In 1935 the property was sold to Wisconsin Dairies, Inc. They used the building as a holding pen for livestock and later a residence. In 1940 the property was given to the City of Janesville and became part of the Parks Department.

Photo #2 Arial View circa 1974

The city used this property for storage of old equipment and materials. People fished in the pond and walked their pets through the area. A BMX bicycle track was built on part of the property too.

One day a retired orthodontist, Dr Robert Yahr, had a dream. He dreamt that the property would make a fine place for a botanical garden where people could come to enjoy the beauty of flowers and plants and learn about them as well. He approached the two Rotary Clubs in Janesville and explained what the area next to Lion's Beach could become with a little help from them and the community. In 1988 with the support of the Rotary Clubs, Dr Yahr went to the City Council and proposed his idea of a botanical garden called Rotary Gardens. He explained that this project would be supported by community volunteers and private donations. There would be no tax dollars involved. The City of Janesville gave approval to the Rotary Clubs, the citizens of Janesville and area communities for a 99 year lease to build the botanical garden. Can you guess how much the rent was? (answer: \$1.00!!!)

Photo #3 Arial View circa 1991(est)

In the fall of 1989 brought the start of many changes to the area called Rotary Gardens. The building was completely gutted and restored. A Master Plan was drawn and the gardens began to develop. A paved parking lot was put in for people using the gardens and the beach.

Photo #4 Transition of the Parker Education Building

With a donation from local business man, Duane Rath, the brick building was gutted, restored and a greenhouse and garage were added. He dedicated it to honor his parents and it is known as the Rath Environmental Center. The building was used for staff offices, a gift shop and a room for educational meetings, displays and receptions. Behind this building was formed the English Cottage Garden. Many volunteers helped to design, plant and care for the garden.

Photo #5 Building the French and Italian Gardens

Beyond the brick wall of the cottage garden to the pergola at the north end of the garden incorporates the elements of the formal gardens of France and Italy. They represent the kind of gardens we would find around castles. A characteristic of those gardens in the Renaissance time was a strong central axis bisected by a secondary axis along the way. The use of parterre flower beds, water fountains, statuary and geometric symmetry emphasized man's control over nature and reflected the artificial customs of the court.

Photo #6 Constructing the Sunken Garden-Recycling

Can you tell me what recycling means? (Get a few answers from the students)
Yes, recycling is using something again but maybe for a different purpose. We do a lot of recycling here at the gardens. Rather than throwing something away, we find another use for it.

The area that once was a BMX bicycle track was just the right size for the sunken garden. Do you see the arch at the entrance of the sunken garden? It was once on the front of a building called the Parker Pen Building. When they remodeled the building and didn't need the arch, someone decided to save it and it was given to the gardens several years later.

Photo #7 The Japanese Bridge

This bridge was made from old light poles discarded from the sewage plant. It took several volunteers many days to design construct and place the bridge in just the right spot so we can now walk all the way around the pond.

Photo #8 The Japanese Garden

The area that has changed the most is now known as the Japanese Garden. Volunteers with landscape machines brought in large boulders, a waterfall and streambed were constructed and plants and sculptures were placed in the garden. Volunteers with carpentry skills built the Tory Gate, entrance gate and tea house. It took many volunteers hundreds of hours to make this garden as well as maintain it. Without volunteers, the garden couldn't exist. Volunteers can choose to work in a particular area of the garden. It's a lot of work being a volunteer, but it's a lot of fun too. Maybe someday you'd like to be a volunteer here.

Photo #8 Dialogue: World Peace Through Friendship

Who saw this sculpture when you arrived on the bus today? How is it different now? Yes, the color has changed from gold to bronze. This photo is from 1991 when the artwork was dedicated. That was ___ years ago. The weather has caused it to change just as the weather changes the gardens. In the photo are the artist, Verne O. Shaffer, the people who donated it, Nanette Draper Lewis and her husband, Ray, Dr Robert Yahr, the man with a dream and the city manager of Janesville, Steve Sheiffer.

The commission for the sculpture that was given to the artist was that the work be flowing, rhythmic and reflect the concept of peace and friendship among all people of the world. The sculpture is dedicated to all Rotarians, Rotary Exchange Students and freedom loving people in the world, because Mrs Lewis believed that Rotary International has played a special role in promoting friendship and freedom among people in countries around the world.

Photo #9 February 1988-Dr Yahr's Letter to the City

Here is the letter that Dr Yahr sent to the City of Janesville about his dream. Does anyone remember how long and for how much this land is rented? That was ___ years ago. Let's go see how the gardens look today.

THE HISTORY OF ROTARY GARDENS THIRD GRADE TOUR Part II – Outdoors

English Cottage Garden

As you have seen from the photographs, these gardens were made one by one during many years. This one of the first gardens; it is the English Cottage Garden. Long ago, many people in England lived in small houses called 'cottages'. They built a low fence out from the cottage to protect their gardens from roaming animals. These gardens contained vegetables, herbs and plants with bright flowers. The plants were planted along the fence and house with the different types of plants mixed together. Often plants were shared with neighbors. Anyone who has a garden like this remembers their friends and neighbors when looking at the various plants in the garden. This seems to me to be an appropriate way for these gardens to begin – with many people sharing ideas and labor to design and plant this garden.

Can you find the original building that you saw in the photographs?

French / Italian Formal Gardens

The gardens that you see between here and the fountain in the pond are formal gardens. Such gardens are usually much larger than cottage gardens. These gardens might be planted around a castle or a large public building. How are these gardens different then the cottage garden behind us?

(Symmetric beds, regular shapes such as squares and circles, the use of short hedges to outline the beds, no fence, more artwork, fewer types of plants and the same ones in several beds. Point out some of the ones that they miss.)

Gardens are places where people can relax and enjoy being outdoors. Formal gardens are often in a park- like setting for many people to enjoy.

{The French Garden is N of the Formal Garden and is framed by the Pergola and the rose display. The roses were selected for their fragrance, thus relating to the many French perfumes. The Herb (Italian?) Garden is to the W of the center formal beds.}

The Japanese Garden

A Japanese garden is a quiet place. It is quite different from the other gardens that we have just seen.

(There is a place along the path down between the shade garden and the Japanese Garden where the sound of rustling of leaves and running water can be heard. It is a good place for everyone to stand still with closed eyes and listen. Tell them that you want them to be very quiet when walking through this garden.)

Walk to the dry sea. Ask how the Japanese Garden differs from the other gardens that they have seen. *(Very few flowers, mostly green color, interesting shapes of shrubs and trees, lots of rocks, water and bridges. No straight lines, formal squares or circles; paths bend. Point out some of the ones that they missed.)* Water is an important part of any Japanese garden, but sometimes no water is available. Then sand or fine gravel can be used to represent the water. The surface is carefully raked to look like ripples on water. Even this garden required many volunteers to build it and take care of it.

(If you now walk to the pond, the large Japanese bridge can be seen. Remind the students that recycled light poles were used to make it. Another example of recycling is the cheese mold window in the Tory Gate.)

Dialogue Sculpture

(Walk towards the Reception Garden and stop where the sculpture can be seen. Ask what the word, dialogue, means and explain how this idea is illustrated by the sculpture. You can always learn something about a person or a group of people by walking through their gardens.)

The Reception Garden and Sunken Garden

Do you remember seeing a photograph of this arch today? It was removed from the Parker Pen Building. This is a good way to recycle it. The statue in this garden was also recycled. The Sunken Garden was recycled, too. At one time, it was a BMX bike track. Do you remember the bare dirt in the photograph that showed the track? Many truckloads of good top soil from a building site were brought here so the plants can grow well. This is another example of recycling.

(If there is sufficient time, you can take the group through the Scottish Garden, past the arboretum and to the Gazebo.

If time is short, walk through the NW corner of the Sunken Garden to the Gazebo.)

If there is time, I like to ask the children: “What can be found in gardens in addition to plants?”

They should be able to think of many such as water features, statues, paths, benches, insects, birds, fish and other animals and PEOPLE!

How Birds Make A Living In Their Habitats

I arrive 15 minutes early if scheduled at a station or 30 minutes early if I am the Team leader to set up for the 3 grade sessions that day. I make sure my name tag is in Place and give my purse to the volunteer in the gift shop to keep in the closet. Next I Make sure my station is set up the way I like it and check to see which school will be Coming that day. Then I look for the other guides, introduce myself if necessary and Check watches. The 3 of us (tree presenter – gazebo, garden guide, and myself –bird Educator) meet the school bus or cars out in front of the building. Groups should already Be separated into 15 – 20 children/ group. One of us will do the introductions, welcome The students , teachers and parents, and then let each of the 3 groups know who they will Follow. The educator who will takes them to each garden will facilitate the rotations after that. When the tour guide has finished she/he will end at the gazebo, leave her group there and take the gazebo group to the education center for the bird program and Pick up the bird group for the next garden tour. The bird group has 40 minutes together, The tree group about 35 (since part will be walking back to education center) and the Garden tour about 35 minutes, also.

“ In A Nutshell “ : Goal of this presentation is to have the students Understand 4 different habitats and types of birds who live there.

Ask the students what is a habitat? Habitat is the place a creature lives, finds food, establishes its home and raises a family.

Forest Habitat:

Birds who live in a forest would be woodpeckers. They have long, sharp, “chisel” beaks for hammering into tree trunks. Their stiff tail feathers are used as a prop to hold them upright on the side of the tree. Their long, barbed tongue helps them reach inside holes they make to collect insects inside the tree trunk. Also, they have 2 toes that face forward, and 2 toes that face backward for better vertical support on tree trunks. (We will use a pair of tweezers to represent this beak.)

Show pictures of this type of bird pointing out the shape of the beak and show poster on the forest habitat.

Field Habitat:

Birds who lives here would be a grosbeak or sparrow, or other seed eater. The beaks on these birds are heavy, conical (or cone shaped) with sharp edges to split the seeds open. They also have strong jaw muscles. They fly in flocks in the winter because food may be concentrated in fields or “weed” patches. The toes on a grosbeak or sparrow are different from the woodpecker. They field birds have 3 toes that face forward and one behind for perching and Hopping. (We will use a pair of pliers to represent this bird’s beak).

Show pictures of this type of bird pointing out the shape of the beak and show poster on the field habitat.

Marsh Habitat:

American bitterns are examples of birds who live in marshes (or areas of tall grasses and standing water). They eat fish and frogs and large insects and so must have long necks for plunging into the water. Their bills are sharp for spearing fish. Their toes are long to allow them to walk on mud and to grasp clumps of vegetation. Their feathers are the colors of the vegetation to blend into their surrounding. (We will use long handled tongs to represent the beaks on these birds.)

Show pictures of this type of bird pointing out the shape of the beak and show Poster on the marsh habitat.

And the last habitat is the Pond:

A duck would be the best example of the type of bird to live here. It has a Fringed or fluted bill for straining food from the water. Their webbed feet help them move through the water and also act like “ snowshoes” on the mud so they won’t sink. Their legs are short, and far back on their bodies for swimming. Compared to a goose that grazes on land – a duck’s neck and legs are shorter for Diving rather than grazing. (We will use a pair of short tongs with netting to represent the duck’s beak.)

Show pictures of this type of bird pointing out the shape of the beak and show Poster on the pond habitat.

< There are 4 tables set up each as a different habitat. One has a small log, hollowed out with pieces of rice (as insects) to represent the forest. One table Has a pan with hard seed to represent the field. Another table has a large bucket of water (set on a towel on the floor). Pieces of vermiculite (as vegetation) float near the top to represent the marsh. And the last table has a bucket (set on a towel on the floor) deeper water with plastic creatures to represent the pond. There are also, nice signs designating each habitat. And a chart/ easel with grids to record the tallies for each of the 4 rotations. >

Now students we are going to play a game where you will all be birds. The Tool you will keep with you throughout the game will be your beak. One hand must , at all times, be behind you and the other with the tool must never go below the water’s Surface. Do you understand? If there is an extra person or two at your table You will have to take turns. Another student will be your counter. And when You are told to begin the game that person will count how many pieces of “food” You are able to collect or eat. This is NOT A RACE.

Each of you are in a habitat that may or may not favor your species or type Of bird. In other words, finding food may not be easy at times. Don’t give up !!

When we switch tables finding food may become easier.

< Either bring a egg timer with you or use the second hand on your watch or the clock on this wall. I'd allow a minute or two for the first 3 table switches. Then, it has be worked out that at the last table switch or 4th try the students will Be in the correct habitat for their beaks. So give them an extra minute or so to Make sure they are able to definitely collect more food. At the end of each rota-
Tion the counter will report to you how much food was collected. In the end it Should become clear why birds have certain types of beaks. Move the beaks, Or tools clockwise after the students leave to prepare for the next group.>

Go over the sheet on What Makes a Bird a Bird. It explains the purpose of Feathers, how their eyes function and tells a little about birds wings, bones, sense Of smell etc.

If you'd like to them have their create their own type of bird on paper with Crayons they may. The have some explain when their birds have certain features. Or you may read the 5 bird riddles and let them guess which bird you are describing.

You have 40 minutes for this presentation. When the next group is brought in from the tree project your group will follow the tour guide to see the gardens. The last of the 3 groups will complete the session.

Mike and I will try to make sure the schedule of schools and volunteer guides Is posted in this room. Each of you should receive a copy of the names and phone #s of The guides in case you need to contact each other.

Teachers will be receiving the dates for sign up mid – August and there will be instructions of who to call and when to call if there is a question about the weather. You also need to check with _____.
Rain dates will be set up if need be. When I say rain date, I mean rescheduling because of weather such as lightening and thunder that would threaten students and guides safety. A little rain is fine, students are advised to dress for the weather and so are our volunteers.

Tree Friend

Goals:

- ✧ Introduce participants to the importance of trees
- ✧ Familiarize participants with species of local trees
- ✧ Create a identification key to reinforce concepts

Group discussion:

Trees are the largest living thing the world. Some trees, such as the giant redwood, can grow to heights of 360 feet (that is taller than a football field is long!). The record for the biggest trees, however, goes to a California sequoia which, if uprooted, would weigh 2,145 tons.

Like all plants, trees convert sunlight into food (called Photosynthesis). In doing so, they change carbon dioxide from the air into sugars for their growth and return oxygen to the air for animals to breath. This is the reason that the great rain forests have been called the ‘lungs of the planet.’

A tree is a tall plant with a singly woody stem. The three main groups of trees are the broadleaves, the conifers, and the palms.

[Teacher’s note: Trees can have multiple trunks; the biology of a shrub is the same as a tree but they just have multiple stems. Technically, there is little biological difference between trees and shrubs and they are often lumped into one category of “woody plants.”]

1) Broadleaved trees have broad flat leaves. They all produce flowers, and after pollination, these flowers develop fruit. Many broadleaved trees lose their leaves every autumn and are called deciduous.

[Teacher’s note: because many broadleaved trees are wind pollinated they do not have showey flowers that are obvious to us. And some trees come as males and females so the flowers are different looking from one tree to the next.]

2) Conifers grow all around the world but particularly in colder regions. They generally have narrow, hard leaves that are known as needles and scales. Nearly all of them keep their leaves on all year, thus called ‘evergreen’. Conifers do not produce flowers; instead they produce cones.

3) There are 3,000 species of palms in the world. Nearly all of them are found in the tropics. They often live in places that are very dry, and often have tough, leathery leaves to keep hot winds from drying them out.

At Rotary Gardens we have an arboretum. In an arboretum we have many types of trees for people to see and to learn about.

Project:

1. Collect 1 leaf from the ground in the arboretum.
 2. Dry leaves off.
 3. Place a piece of white paper over your leaf.
 4. Gently use a crayon to make a leaf rubbing.
 5. Compare your leaf rubbing to the chart to identify your leaf.
 6. Borrow your neighbor's leaf and repeat process using same piece of paper.
 7. Borrow another neighbor's leaf and add a third rubbing to your sheet.
 8. Compare your leaves to the ID-chart and write the correct name of the tree by the leaf.
 9. Write your name on the back of the paper and turn in to a chaperone for a safe trip home.
- ✧ Does your leaf have a smooth or rough edge?
 - ✧ Is it a simple leaf or one with many small leaflets?
 - ✧ Is it shaped like your hand or like a feather?

Common Trees in the Arboretum

ASH (green and white)	HORSECHESTNUT
MAPLE (Norway, silver, red, more)	HACKBERRY
LINDEN (little leaf, big leaf, more)	ELM
OAK (red, white)	SWEETGUM
CHERRY	COFFEETREE

ASH (green and white)

Ash trees are common Wisconsin woodland trees. Their wood can be used for baseball bats and tool handles.

MAPLE (Norway, silver, red, more)

This is a common tree found all over Wisconsin. Sugar maples can be tapped to make syrup for pancakes.

LINDEN (little leaf, big leaf, more)

Linden trees can go by another name: Basswood. To avoid confusion, people often use the scientific name of *Tilia* sp.

OAK (red, white)

Much of Southern Wisconsin used to be an oak savanna (mixture of trees and grasses) before the pioneers came.

CHERRY

Cherry trees are popular fruit trees used to attract birds (and to make pies!)

HORSECHESTNUT

Native to Greece and Albania, often found in the mountains.

HACKBERRY

A tough native tree whose bark resembles that of an alligator's hide.

ELM

Once a common tree in the USA, its numbers plummeted after the introduction of Dutch Elm Disease, killing millions of trees.

SWEETGUM

The leaves of this tree are star-shaped and the fruit is a spiky ball.

COFFEETREE

The seeds of this tree were once used as currency by the Native Americans.