



Tree
Bee

TREE BEE RESOURCE KIT

2025



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BACKGROUND



What is Tree Bee?

Tree Bee is a free, interdisciplinary program that can enrich any subject! From history, math, music, science, physical education and beyond Tree Bee can help to engage students in environmental learning while meeting Ontario curriculum expectations. Students will use provided resources and tools to grow their knowledge and are encouraged to challenge themselves in a friendly virtual competition against their peers.

Why Tree Bee?

Kids Love Trees, Tap Into It:

The Tree Bee program and associated resources draw on students' connection to, and fascination with, nature to engage in meaningful learning. Studies show that tapping into this interest will motivate students to not just learn about natural systems but also to develop critical thinking, problem solving, and teamwork skills.

Tools to Bring your Class Outside, Nearby:

Spending time outside is associated with a wealth of benefits including a reduction in stress, improved memory, better emotional regulation, and improved learning – but you don't have to go far to reap the benefits! Using the York Region Tree Bee resources you can bring environmental and outdoor education to students in your school yard or neighborhood, reducing administration and travel costs.

Early Career Exploration:

Help students discover some of the many forest careers available to them through Tree Bee! Early career exploration will help to grow and inspire the future foresters, technicians, scientists, and engaged community members needed to help us protect natural resources for all our benefit.

Learning Objectives

- increase awareness of forest management and forest ecosystems;
- improve knowledge of, and ability to, identify common tree species;
- highlight the historical and current importance of forestry to Canada's economy and history;
- learn about the ecological goods and services provided by forests and trees;
- foster an appreciation for green spaces; and
- engage in cooperative learning and develop teamwork skills.

What to Expect at the York Region Tree Bee Competition

First and foremost, you can expect your students to have fun! The optional competition component of the York Region Tree Bee is an opportunity for students to put their learning to action and demonstrate new knowledge. Student teams will be challenged to complete an online test which includes 20 tree identification and 15 multiple-choice Forest Conservation questions.

Students in Grades 4, 5 & 6 (ages 9 to 12) are eligible to participate in the York Region Tree Bee. Participants must either live in, or belong to a school, community group or club located in York Region.

Tests must be written in a single sitting between November 24, 2025 & November 30, 2025 using Google Forms, if needed a printable version of the test will be made available by request. There is no time limit but you can expect testing to take 60 minutes to complete. Teams are permitted to reference study materials while writing their tests – but if your students are up for the challenge try without!

Tests must be written in teams of 2 to 35. If you wish to divide your group into smaller teams for writing, we will accept and grade up to seven tests per registration.

The top performing teams will be announced on social media with the top scoring team taking the championship title for York Region! While scores will not be released publicly, they can be requested by teachers and used as part of student assessment.

York Region Tree Bee Checklist

- ☐ Assemble your York Region Tree Bee team. Maximum of 35 students, if your group is larger, please contact Forests Canada. Teams must be comprised of grade 4, 5, or 6 students from the same class, club or community group based in York Region.
- ☐ Register no later than Nov 19, 2025. But remember sooner is better as you will have more time to study!
- ☐ Study for the York Region Tree Bee competition. Review the provided resources including: Forest Conservation Question bank, Tree Species Factsheets, Inquiry Activities and practice tests.
- ☐ Decide if your team will write the test as one or break into smaller teams. Note: tests must be completed by groups of between 2 – 35 students each. Large groups may break into a maximum of seven smaller teams and submit one test each.
- ☐ Contact Forests Canada if you require a Word version of the York Region Tree Bee test. Unless otherwise noted test is completed using Google Forms.
- ☐ Team(s) write the virtual York Region Tree Bee test between Nov. 24 - 30, 2025.
- ☐ Complete feedback survey while you wait to hear the results!



RESOURCES



Preparing for York Region Tree Bee Competition

A variety of free resources are available to educators looking to bring Tree Bee and forest education into their classrooms or clubs. Resources include online tools, inquiry activities, tree species factsheets and question bank. Educators are encouraged to use all the suggested resources to ensure their students are prepared for the competition.

Tree Bee Webtool

Challenge your students to learn about the trees in their school yard and communities using the Tree Bee webtool. To access visit www.treebee.ca. The mobile friendly website features a simplified dichotomous key. Working through the questions on the site users can identify 158 native, and common non-native, tree species using key features.

If you are unfamiliar with the Tree Bee tool or how to use a dichotomous key check out our short “How to Use Tree Bee” training video at <https://youtu.be/ljCwHcgaQR4>

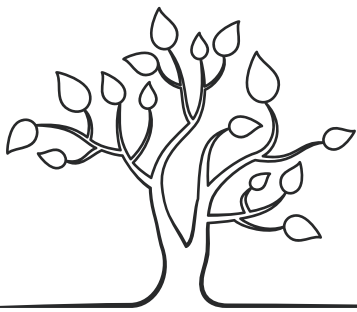
For a more focused demonstration of how to use the Tree Bee Webtool please refer to the following videos :

- Introduction to Coniferous Tree Identification – <https://youtu.be/2fDrg2hPp-g>
- Introduction to Deciduous Tree Identification - https://youtu.be/xfm9Ga_KZQc

Inquiry Activities

The following Inquiry Activities were designed to teach key tree identification and forest management topics. We recommend you use these activities to reinforce tree identification skills and better prepare your students for the virtual competition component.

We recommend the Inquiry Activities be implemented in the order presented as some are seasonally dependent. Specific curriculum links for the Inquiry Activities can be found in Appendix A.



Inquiry Activity **TRUE COLOURS**

Goal: Students will learn about plant pigments and discover what causes fall colours.

Teacher Background

Chlorophyll is a green pigment in most plants, primarily responsible for photosynthesis, the process that plants use to create their own food using sunlight, carbon dioxide, and water. This pigment is responsible for the lush green colour of our forests.

Chlorophyll isn't the only pigment in leaves, however! All plants have invisible secondary pigments that serve vital functions in the leaf and shine through in the autumn. Chlorophyll disappears when deciduous trees such as oaks, maples, and even tamaracks experience shorter days and cooler temperatures as seasons change. As the leaves receive less sunlight, chlorophyll levels drop, but the other pigments remain. The leaves appear to be a different colour, even though the pigments were there the whole time!

There are two categories of secondary pigments. Carotenoids appear as yellow to orange. They are the same pigments responsible for the colour of carrots. Anthocyanins appear as red to blue and play a silent role throughout the year as protectors from UV light.

The following experiment works because the pigments in the leaves can dissolve in alcohol. The molecules of different pigments are different sizes, which allow the smaller ones (including most carotenoids and some anthocyanins) to travel through the filter paper faster than the larger ones, such as chlorophyll. As molecules of the same size move the same speed, coloured bands will form on the filter paper as the liquid is dispersed and then dries. This separation of pigments through the filter paper is called chromatography.



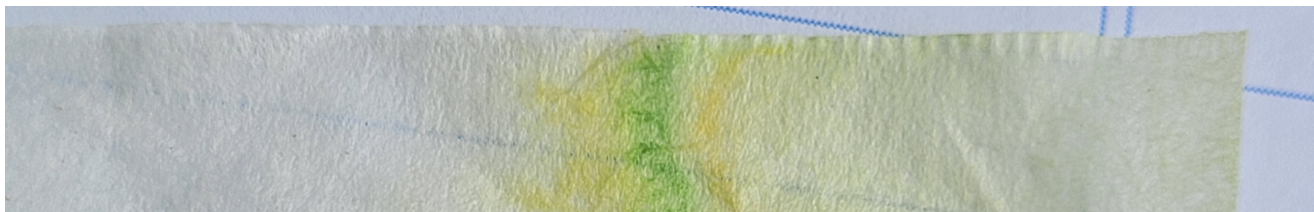
Materials:

- A glass jar
- Rubbing alcohol
- Coffee filter
- Green leaves
- Pencil
- Tape
- Scissors
- Mortar & pestle
- Clean paper



Activity:

1. Ask students to collect a single green leaf each from outside. Classes should try to collect leaves from the same tree, so all students have similar results.
2. Tear the leaves into small pieces and mash into a pulp using the mortar and pestle.
3. Put the leaf mash into a jar and add just enough rubbing alcohol to cover. Let stand for 5 minutes.
4. While the leaves stand, cut a piece of coffee filter paper that will touch the bottom of the jar while taped to a pencil, without it bunching up at the bottom of the jar, about 2.5 cm x 10 cm.
5. After 5 minutes, balance the pencil atop the jar and lower the filter paper into the jar. It should only just touch the bottom – if too long, remove and cut.
6. When liquid has moved halfway up the filter paper, remove it from the jar and lay it on a fresh sheet of paper to dry.
7. Observe the bands of colour that appear after the filter paper has dried.

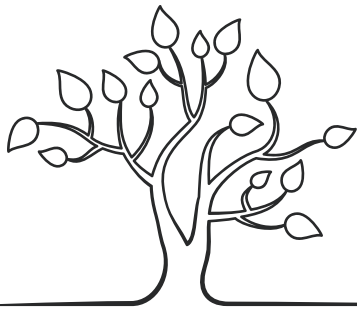


Extension:

Instead of having the whole group sample from the same tree, have different groups of students test different species of tree. What are the differences between species?

Save your filter paper and wait until the leaves of your chosen tree change. Compare the colour of the changed leaves to the bands on the filter paper experiment. Did the experiment predict what colour the leaves would turn?

Have students perform the same experiment with leaves that have already changed colour. Are there any differences in the resulting filter paper? Why or why not?



Tree Bee Inquiry Activity

LEAF IT TO THE ARTISTS

Goal: Students will learn about why leaves are shaped differently and explore some of those shapes for themselves.

Teacher Background

Leaves are by far the most easily identifiable part of any tree. From needles on pines to the lobed leaves of maples, there are a lot of different leaf shapes that we can find even in our local forests.

Leaves have a key role in photosynthesis, the process that plants use to create their own food using sunlight, carbon dioxide, and water. While all leaves have the same role, they differ from one another in shape, texture, size, and arrangement - all features we look at when identifying a tree by its leaves.

Conifers, for example, keep their needle or scale-like leaves year-round so that they don't have to make new leaves each spring. These leaves are slim with a thick waxy coating or cuticle to protect them from the harshest sunbeams and the coldest temperatures, preventing both evaporation and freezing. This means that conifers are well adapted to living in harsh climates like the northern reaches of Ontario or on top of mountains.



These needles belong to an Eastern Hemlock (*Tsuga canadensis*), and will stay on the tree for three or more years!



This broad Striped Maple (*Acer pensylvanicum*) leaf with shallow lobes is perfect for collecting sunlight in the understory, shaded by the taller trees above it in the forest.

Deciduous trees are different, as they drop their leaves every autumn and grow new ones each spring. These leaves may be temporary, but they are more effective at photosynthesis in the summer than a conifer's needles or scales, as they are larger (or have a greater surface area) and come into contact with more sunlight. These leaves can vary in size and shape depending on where the plant is growing. For example, Striped Maple (*Acer pensylvanicum*) has very large leaves compared to other maples, but it is commonly found in the understory, the layer of small trees and shrubs beneath the canopy in a forest. Having large leaves helps this maple collect sunlight while living in the shade of other, larger trees. Big leaves are less common on trees growing in direct sunlight, as these trees need to grow leaves that will not overheat when exposed to the full force of the sun.



Horse Chestnut (*Aesculus hippocastanum*) leaves are an example of palmately compound leaves, where all leaflets radiate out from a central point.



Kentucky Coffee Tree (*Gymnocladus dioica*) leaves, a double compound leaf and the largest leaf found on a tree native to Ontario. These leaves look similar to pinnately compound leaves.

Some leaves, like those on ash or locust trees, are compound. These leaves are broad, but have a smaller surface area than a simple leaf of the same size, which reduces wind resistance and water loss by evaporation. These leaves are common on desert plants, or plants well adapted to drier environments. Learning how to ID compound leaves with a guide can be tricky - in general, palmately compound leaves have leaves that radiate out, like fingers from your palm, and pinnately compound leaves are "feather-like", as "pinna" is the Latin word for feather.

In this activity, students will have a chance to make an interesting art piece with broad leaves found from a local tree, and get a chance to go out and identify some trees for themselves. This activity is most easily done in autumn, when broad leaves are already falling to the ground.

Materials:

- Crayons with no paper (soak in water for 1 hour for best results)
- Leaves (to be collected by students, if time allows)
- Watercolour paints
- White paper (heavier paper like construction paper preferred) cut into 5x5 inch squares

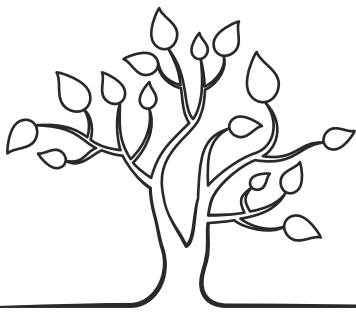


Activity

1. Take students outside to an area with different trees and space to roam. Have them collect at least one (1) leaf each, while identifying the trees.
2. Take the leaves inside where the rest of the craft materials are. Students should get one piece of paper per leaf. Cover the leaf with paper, and rub the crayon horizontally over the paper to create a leaf rubbing.
3. Once the waxy crayon is covering the outline of the leaf, the inside of the leaf should be painted in one colour, and the outside in another. For contrast, students can use a dark crayon and light paint, or a light or white crayon and any colour they choose.
4. Label each leaf rubbing with the species, the name of the student, and the date.

Extension

- While outside, take the opportunity to go through tree identification for students! This is a great time for hands-on learning.
 - This activity can tie into preparation for the Tree Bee competition by learning how to identify local trees on the [Testable Tree List](#).
- Ask students to write key identifiable features of their chosen leaves on their art (eg. alternate branching was seen on the tree, leaf has lobes, leaf has teeth, leaf is hairy, etc).



Inquiry Activity LEAF BINGO

Goal: Students will learn about different types of leaves and explore the trees in their schoolyard, around their home, or on a hike.

Teacher Background

Leaves are by far the most easy parts of a tree to identify, due to the wide variety of visible differences between them. Coniferous and deciduous trees, for example, have major differences between their leaves.



Coniferous trees have needles or scales that stay on the tree year-round



Deciduous trees have broad, flat leaves that turn colour in the fall

Coniferous leaves are more simple to identify, and can be easily keyed out by students using this [handy tree wheel](#). Some features associated with conifers are whether they have scales or needles, or whether the needles are bundled or individually attached to the twig.

Deciduous trees, on the other hand, can have a host of features including:

- Teeth: whether the edge of the teeth are smooth or rough to the touch
- Lobes: whether the leaf has projections from the blade of the leaf
- Shape: many different general leaf shapes, including heart-shaped, narrow, or triangular
- Simple vs Compound: whether or not the leaf is composed of a single leaf or multiple leaflets



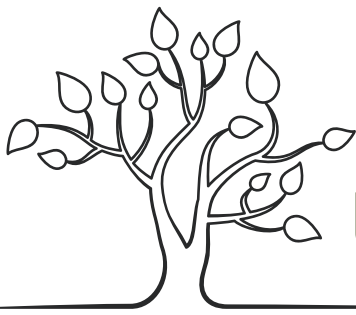
This Red Maple (*Acer rubrum*) leaf is a simple leaf with teeth and lobes.

With this activity, students are asked to go outside and see how many different leaf features and types of leaf they can spot in order to fill a bingo card. Leaf bingo can be done in the school yard, at home, or on a group hike. Chose what option works best for your class, and get exploring!

Extension: Ask students to write the names of trees that match the features listed on the bingo card after they have successfully identified each tree. Make sure to bring a copy of the [Tree Bee Pocket Tree ID Guide!](#)

LEAF BINGO

 Alternate leaves	 Asymmetrical Base	 Coniferous	 Cordate (Heart Shaped)	 Curved/Twisted Needles
 Deciduous	 Deltoid (Triangle Shaped)	 Double Compound	 Lobed	 Narrow
 Needles	 Palmately Compound	Free Space!	 Opposite Leaves	 Oval
 Not Lobed	 Pinnately Compound	 Oak	 Rough Edges	 Scales
 Smooth Edges	 Maple	 Symmetrical Base	 Wedge	 White Pine



Inquiry Activity URBAN LANDBARKS

Goal: Students will improve their spatial awareness and tree identification skills by creating a local tree map of their neighbourhood or school yard.

Teacher Background

Trees are everywhere in our communities, thriving in urban forests. We pass by them every day on our drive to work, way to school, or walk around the neighbourhood.

An urban forest can be defined as any woody plants growing in and around a city, suburb, town, or other urban environment. This includes trees and shrubs in parks, along roadways, and in backyards. Urban trees play an important role in the environment and can benefit urban biodiversity by reducing air pollution, lowering temperatures, and providing wildlife with important habitat.

The management of urban trees is known as urban forestry. It is a specialized field of forestry that considers the contributions that trees make to the health and well being of people, while also considering the challenges that come with urbanized environments. Urban trees deal with more stress than their forest counterparts because of air pollution, road salt, soil compaction, and invasive species.

A tree inventory is a key database used by municipalities and urban forestry departments to determine and monitor urban forest health. While each city or town might have different data in their inventory, they will all include information on tree species, location, size, and general tree health. In this activity, students will explore their local urban forest and design their own tree inventory map.

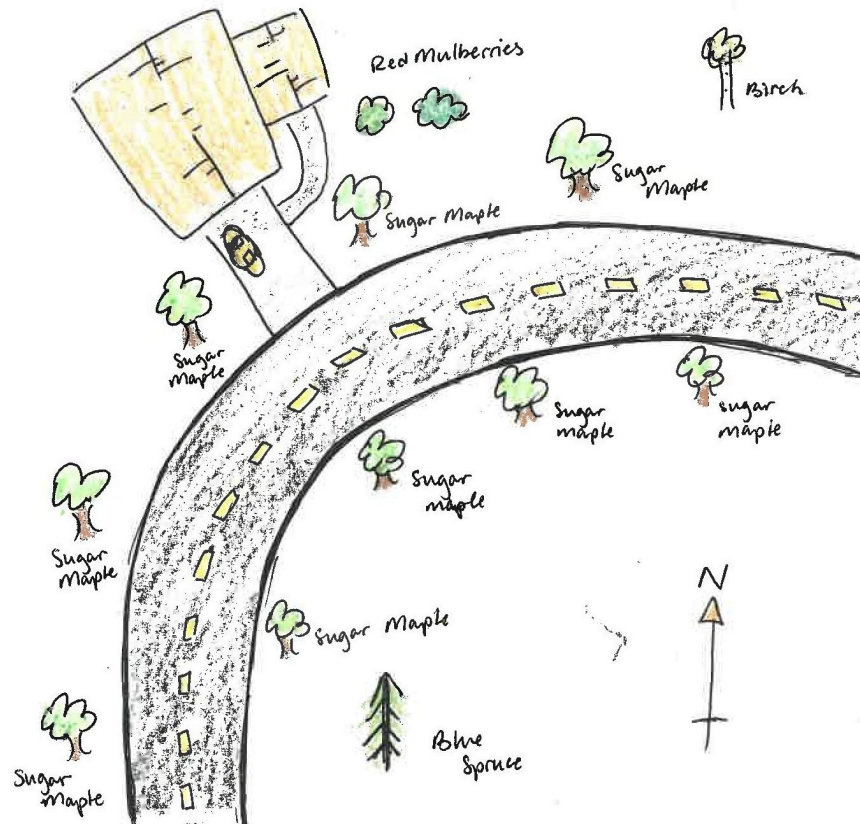
Materials:

- Pencil
- Paper
- Clipboard or notebook
- Pencil crayons (optional)
- Pocket Tree Bee ID guide
 - Can substitute with another available tree identification guide.



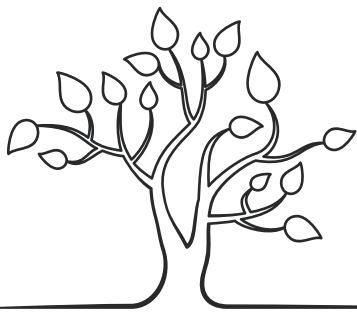
Activity:

1. Draw a map of your street or school yard
2. Add important built landmark features (i.e. buildings, statues)
3. Add trees. Note: if there are lots of trees, pick your favourites.
4. Try to identify each tree on your map, using either the [Tree Bee webtool](#), or another identification resource that is applicable to your area.
5. Label the trees drawn on your map.



Extension:

1. Count how many trees of each species you see in the area your map covers. Are they all the same? Or are they different?
2. Make note of where the trees are located. Do you think they intentionally planted there? Why/why not?
3. Do you think the trees you mapped looked healthy? Why/why not? If they don't look healthy, what could be impacting their health?



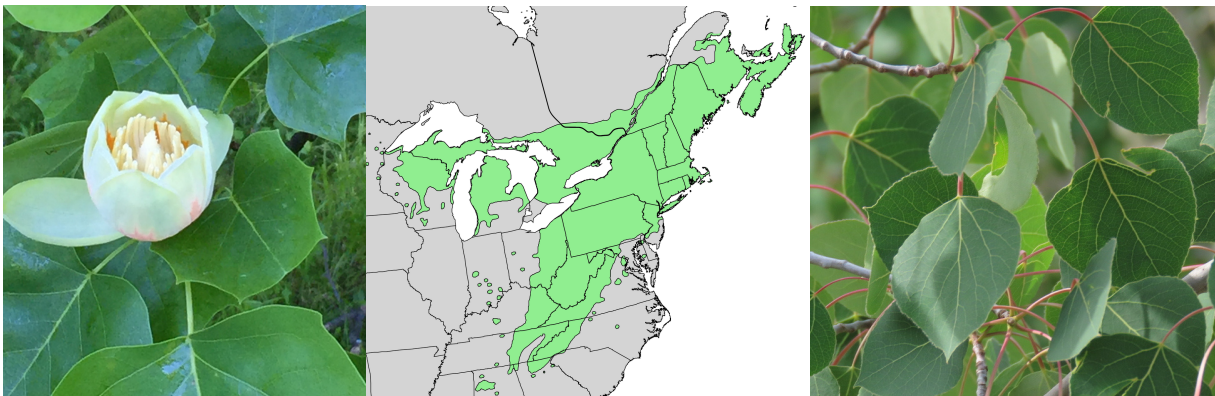
Inquiry Activity SHADY CHARACTERS

Goal: Students will learn the names of common tree species and discover the origin of those names through research into their appearance, habitat, and ecology.

Teacher Background

When looking through tree or wildlife guides, you may notice that each species has a series of associated names that may seem unrelated. You might find yourself asking what the difference is between a Black Spruce and a Bog Spruce, or whether Paper Birch or White Birch is the correct choice. It is easy to assume that trees only have one name, but there can be dozens of names to refer to the same species. No one plant name is more important than another, however; each has their own place in a community, culture, or language.

The names used to casually discuss trees are known as common names. They are generally descriptive and can tell you something about what the tree looks like, where it grows, or an identifying feature. While common names are most commonly used, there isn't always a consensus on what a tree should be called. For example, the Manitoba Maple is commonly known as such in Canada, but it is also known as Ash-leaved or Ashleaf Maple, Box Elder, Boxelder Maple, or River Maple. These common names refer to either the general shape of the leaf (similar to an ash or boxwood), the colour of the wood (white, like an elder tree), or where it is commonly found (by the river). As this plant can be found over a wide geographic range, its name varies depending on who is talking about it and where they learned the name from. Trees carry different names between languages as well – for example, a maple tree in English *un érable* in French.



Left: Tulip Tree (*Liriodendron tulipifera*) gets its name from its tulip-like flowers

Centre: Eastern Hemlock (*Tsuga canadensis*) grows in a range contained to Eastern North American

Right: Trembling Aspen (*Populus tremuloides*) has leaves that tremble in even light breezes

With all the different communities, cultures, and languages that can be found across a species' range, using common names can leave details to be lost in translation. Two scientists could be studying the same tree, but by giving the species different names, might assume that their research did not overlap. In the 18th century, this cross-cultural game of broken telephone was resolved with the advent of binomial nomenclature, a system of using two names to classify every species. These names bridged the gaps between common names and standardized the way that flora and fauna were discussed across cultures. By having a unique name for each species of plant, botanists could keep track of a specific plant's range and remove any language barriers.

By looking at the common names of trees, their scientific names, and their names in different languages, we may be humbled by the history, languages, and cultures that molded these plants' monikers across time. In this activity, students will be asked to research a tree and craft a 'wanted poster' that addresses its appearance, habitat, range, and role in the local ecosystem. Any of the tree's attributes featured on the poster may inform the tree's aliases.

Materials:

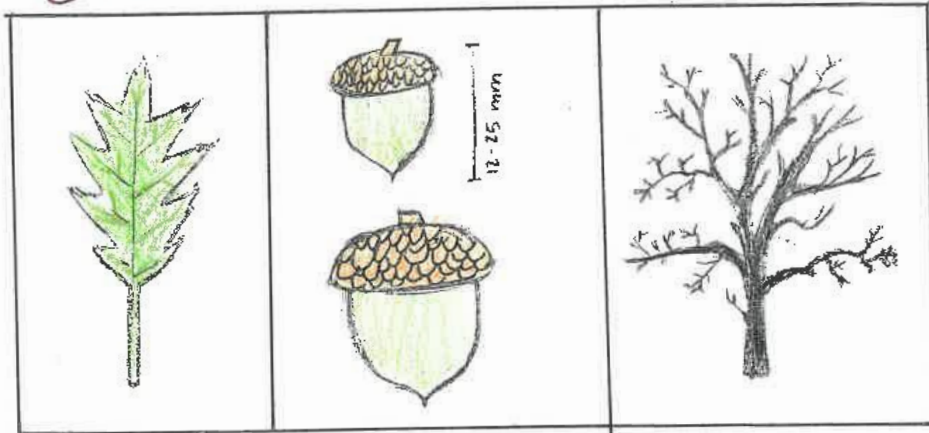
- Blank sheet of paper
- Pen or pencil
- Pencil crayons
- A tree ID guide (such as [Tree Bee](#))

Activity:

1. Ask each student to pick a unique tree from 2025 York Region Testable Tree List.
2. Using a resource like Tree Bee, another reputable website, or a handheld tree ID guide, have students find images of their tree to draw. The student-produced drawings will serve as the 'headshot' on their wanted posters. Encourage students to include 2-3 defining characteristics of the tree (e.g. leaves, tree shape, bark texture, fruit/seeds) in their portrait.
3. Using the same source, have students do some research into the plant's aliases to add to the wanted poster. This list must include:
 - a. Two English names
 - b. French name
 - c. Scientific/binomial name
 - d. A common name in an additional language of their choice, using a reliable source such as Wikipedia or the Taxonomy tab on iNaturalist - not Google Translate
4. Describe the drawing on the wanted poster, writing out the tree's key identifying features.
5. Describe the tree's habitat and range, or its 'known hangouts' (e.g. bogs in southern Ontario)
6. Describe the tree's relationship to any animals that interact with or rely on it, or its 'known associates' (e.g. humans making maple syrup, Emerald Ash Borers in ash trees, birds that eat berries).

WANTED

Quercus rubra "Red Oak"

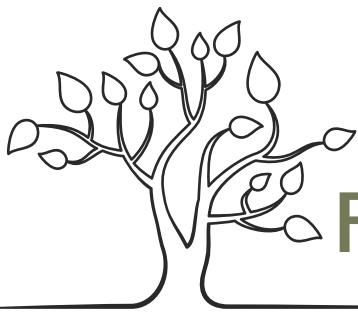


Aliases: Northern Red Oak, Champion Oak,
Chêne rouge d'Amérique, Mitigomzh-Miskozi

Appearance: Simple, alternate leaves with v-shaped lobes. Can grow up to 20-30 m tall. Produces acorns. Turns deep red in autumn.

Known Hangouts: Regularly found in good, slightly acidic soil from the north end of the Great Lakes, east to Nova Scotia, and down into the USA.

Known Associates: Provides food for blue jays, wild turkeys, squirrels, small rodents, raccoons, etc. Twigs and leaves are grazed by white-tailed deer. *Q. rubra* is the provincial tree of P.E.I.



Inquiry Activity **FOREST IMPRESSIONS**

Goal: Students will explore the varying textures of bark found on local trees and compare them by creating a bark rubbing quilt.

Teacher Background

While trees are most easily identified by their characteristic leaves, there are other features one can use to determine a tree species. One example is bark, which is arguably a tree's most immediately noticeable feature. Unlike leaves, fruits and flowers, bark remains on trees throughout the year, making it a useful identification tool. Bark is a living shield against the elements, with a species-specific pattern of cracks and crevasses developing over years of growth.

The most important role of bark is to protect a tree from injury and disease. This can be achieved through a number of adaptations, such as prickly thorns to keep mammals away, bad tasting chemicals to deter insects, or an unusually dense layer of bark to protect the tree from forest fires. While the external surface of bark is often hard and can be almost woody itself, it protects two soft inner layers. The inner bark, also known as phloem, carries the sugars created by leaves to the tree's branches, trunk, and roots, providing food for the whole tree. Right next to the phloem is the cambium, which is the growth layer of a tree that is responsible for the outward growth (also known as secondary growth) of tree trunks. The cambium creates a new ring of woody tissue each year that is visible in cross-sections and tree cookies. Both the phloem and cambium are essential to the health and well-being of a tree and are protected by the living shield that bark provides.



As a tree matures, its bark will change and develop a unique texture as it cracks or stretches to accommodate annual outward growth. As a result, a younger tree's bark will generally have less texture when compared to a mature tree of the same species, and very old tree bark will have a different texture than mature bark due to age and weathering.

Young Black Cherry (*Prunus serotina*) bark (left) compared to mature Black Cherry bark (right). When identifying the mature tree, it is easy to spot the "burnt cornflakes" appearance of the bark; a reference to its dark colour and raised, flaked texture.

While bark on its own is not the most beginner-friendly identifying feature of a tree, it certainly can play a part in determining what tree you are trying to identify. Each species will develop bark differently. In this activity, students will explore different textures of bark by making rubbings on paper with crayons. Each bark rubbing can be compared to others by attaching all the rubbings together to create a quilt.

Materials:

- White printer paper
- Wax crayons, multiple dark colours (suggested)
- Tape or glue
- Construction paper (optional)

Activity:

1. Provide each student with at least one piece of paper and crayons. Have students
2. select a tree and make a rubbing of the bark. Repeat as desired. Either tape the
3. rubbings together to form a paper quilt (use construction paper to form a border) or use them separately to decorate the classroom walls.



Extension:

Take your students on a bark walk. Ask each student to find the tree with the most interesting bark. Then, have them find the tree which they think is the youngest and the oldest tree of the same species. Ask them to observe and compare the bark. Do the cracks in the bark run up and down or sideways? Are they long or short ridges?

Record as many words as possible to describe the bark of each tree (i.e. texture, colour). Build a list of descriptive words and have students use the vocabulary to write a poem (e.g. describing the tree with the most interesting bark or contrasting the old and young trees).

Testable Tree List

- | | |
|-------------------------------------|--------------------------------|
| 1. Ash, White | 26. Locust, Honey |
| 2. Aspen, Large-Toothed | 27. Maple, Red |
| 3. Balsam, Poplar | 28. Maple, Manitoba |
| 4. Basswood, American | 29. Maple, Silver |
| 5. Beech, American | 30. Maple, Striped |
| 6. Birch, White | 31. Maple, Sugar |
| 7. Birch, Yellow | 32. Mountain-Ash, American |
| 8. Buckeye, Ohio | 33. Oak, Bur |
| 9. Catalpa, Northern (non-native) | 34. Oak, Red |
| 10. Cedar, Eastern White | 35. Oak, White |
| 11. Cherry, Black | 36. Pawpaw |
| 12. Cherry, Pin | 37. Pine, Eastern White |
| 13. Chestnut, Horse (non-native) | 38. Pine, Jack |
| 14. Coffee Tree, Kentucky | 39. Pine, Red |
| 15. Dogwood, Alternative-Leaf | 40. Redbud, Eastern |
| 16. Dogwood, Eastern Flowering | 41. Sassafras |
| 17. Dogwood, Red Osier | 42. Serviceberry, Smooth |
| 18. Elm, American | 43. Spruce, Black |
| 19. Fir, Balsam | 44. Sumac, Staghorn |
| 20. Ginkgo (non-native) | 45. Sycamore, American |
| 21. Hackberry, Common | 46. Tamarack |
| 22. Hemlock, Eastern | 47. Tulip Tree |
| 23. Hickory, Shagbark | 48. Walnut, Black |
| 24. Hop-Hornbeam, American | 49. Willow, White (non-native) |
| 25. Linden, Littleleaf (non-native) | 50. Witch-Hazel, American |

Tree Species Factsheets

The Tree Species Factsheet series includes information on fifty different native, and common non-native, tree species found in Ontario. The trees in this factsheet series are the only trees which may be included in the Tree Identification component of the York Region Tree Bee test.

Other Tools

The Question Bank will help prepare your students for the Forest Conservation component of the Tree Bee competition which will consist of 15 multiple choice questions.

Other training tools and resources include a make your own memory activity ([Leaf it to Memory](#)) and printable tree identification guide ([Tree Bee Pocket Guide](#)). If you wish to supplement your classroom unit with additional materials, you can search the Forests Canada Education Resources at <https://forestsCanada.ca/en/resources/education>

If additional resources are developed they will be shared with all registered teams through [The Hive](#) and a Tree Bee newsletter.



APPENDICES



APPENDIX A:

Curriculum Links, Overall Program & Resources

General curriculum links; Tree Bee (program)

By participating in Tree Bee, students will...

Grade 4: Science & Technology

- Habitats and Communities: B2.3 describe the relationship of organisms in a food chain, and classify organisms as producers, consumers, or decomposers
- Habitats and Communities: B2.6 describe structural adaptations of a variety of plants and animals and how these adaptations allow the organisms to survive in specific habitats

Grade 6: Science & Technology

- Biodiversity: B1.1 assess the benefits of biodiversity and the consequences of the diminishing of biodiversity
- Biodiversity: B2.1 describe the distinguishing characteristics of different groups of organisms, and use these characteristics to further classify these organisms using a classification system
- Biodiversity: B2.2 demonstrate an understanding of biodiversity as the diversity of life on Earth, including the diversity of organisms within species, among species in a community, and among communities and the habitats that support them
- Biodiversity: B2.4 describe ways in which biodiversity within and among communities is essential for maintaining the resilience of these communities
- Biodiversity: B2.5 describe interrelationships within species, between species, and between species and their natural environment, and explain how these interrelationships sustain biodiversity
- Biodiversity: B2.6 explain how invasive species reduce biodiversity in local environments
- Biodiversity: B2.7 explain how climate change contributes to a loss of biodiversity, and describe the impact of this loss

True Colours, LEAFO Bingo

By the end of these activities, students will be able to address the curriculum links presented for the general Tree Bee program (above)

Leaf it to the Artists

By the end of this activity, students will:

Grade 4-6, The Arts

- Visual Arts: D1.4 use a variety of materials, tools, and techniques to determine solutions to design challenges

Shady Characters

By the end of this activity, students will:

Grade 4-6, The Arts

- Visual Arts: D1.2 demonstrate an understanding of composition, using selected principles of design to create narrative art works or art works on a theme or topic
- Visual Arts: D1.3 use elements of design in art works to communicate ideas, messages, and understandings
- Visual Arts: D3.1 describe how forms and styles of visual and media arts represent various messages and contexts in the past and present

Grade 4 Social Studies

- Political and Physical Regions of Canada: B2.2 gather and organize information and data from various sources to investigate issues and challenges associated with balancing human needs/wants and activities with environmental stewardship in one or more of the political and/or physical regions of Canada
- Political and Physical Regions of Canada: B3.1 identify various physical regions in Canada, and describe their location and some of the major ways in which they are distinct from and similar to each other

Grade 6 Social Studies

- Heritage and Identity: A1.1 explain how various features, including built, physical, and social features of communities, can contribute to identities in and images of a territory and/or country
- Heritage and Identity: A3.1 identify the traditional Indigenous and treaty territory or territories on which their community is located

Forest Impressions

By the end of this activity, students will:

All grades, The Arts

- Visual Arts: D1.4 use a variety of materials, tools, and techniques to determine solutions to design challenges



Tree
Bee



Forests
Canada


York Region