

NEIC Camp Crown

Tree Identification

Tree ID Scavenger Hunt Game at Camp Crown

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Introduction

Trees are essential to our existence. Thus, it is but natural - and sensible - that we should plant more of them, let them grow into their full potential, and utilize whatever usable parts or products they may have. After all, they have been here on earth for a long time, maybe even far longer than humans have existed on the planet. So we should respect this longevity, and we should live harmoniously with such useful living beings.

But in this modern age, are we still in touch with mother nature's grand creations? If you happen to spot a tree, will you be able to name it, on the spot? If you're more of a fruit person, then seeing their produce would help you enormously in identifying them. But what about through their leaves?

This leader guide is designed to help scouts learn about the trees around them. It will educate them about how to identify trees (and plants) and offers some new tools and technology to help them do that. “Fun with a Purpose”, we’ve structured this activity in a game format. So, a unit can make a context of the activity so Scouts will enjoy the nature education of the program.

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Tree Identification

Nature Games

Scavenger “Tree Hunt”

1. Goal: Winning team correctly identifies the most trees within the time limits of the game.
2. Organize participants into teams by Den or Patrol or in ad hoc “buddy teams.
3. Each tree must be described with information recorded on the attached “game sheet”.
4. Mark the location of the Tree on the Map of Camp Crown
5. At the end of the designated time period, all teams return to have their worksheets verified and scored.

How Tall are the Trees?

1. Goal: Winning team correctly identifies the dimensions of five trees found at Camp Crown.
 - a) Red Pine
 - b) Common Buckthorn
 - c) Eastern Cottonwood
 - d) Rocky Mountain Juniper
 - e) Eastern Red Cedar
 - f) Sumac
2. Organize participants into teams by Den or Patrol or in ad hoc “buddy teams.
3. Each tree must be described with information recorded on the attached “game sheet” and located on the Map of Camp Crown.
4. Use scout skills to estimate the height of each tree. A tape measure (or equivalent) is necessary to measure the circumference of the trunk.
5. At the end of the designated time period, all teams return to have their worksheets verified and scored.

Leaf Drawing

1. Goal: Outline the leaves of five different trees you find at Camp Crown
2. Organize participants into teams by Den or Patrol or in ad hoc “buddy teams.
3. Find five different types of trees. Draw a picture (or outline) of the leaf of each tree. Use your resources to identify the name of each tree and mark where you located each tree on the map of Camp Crown
4. At the end of the designated time period, all teams return to have their worksheets verified and scored.

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Tree Identification

Camp Crown Tree Identification

Scavenger Scoresheet

Date:

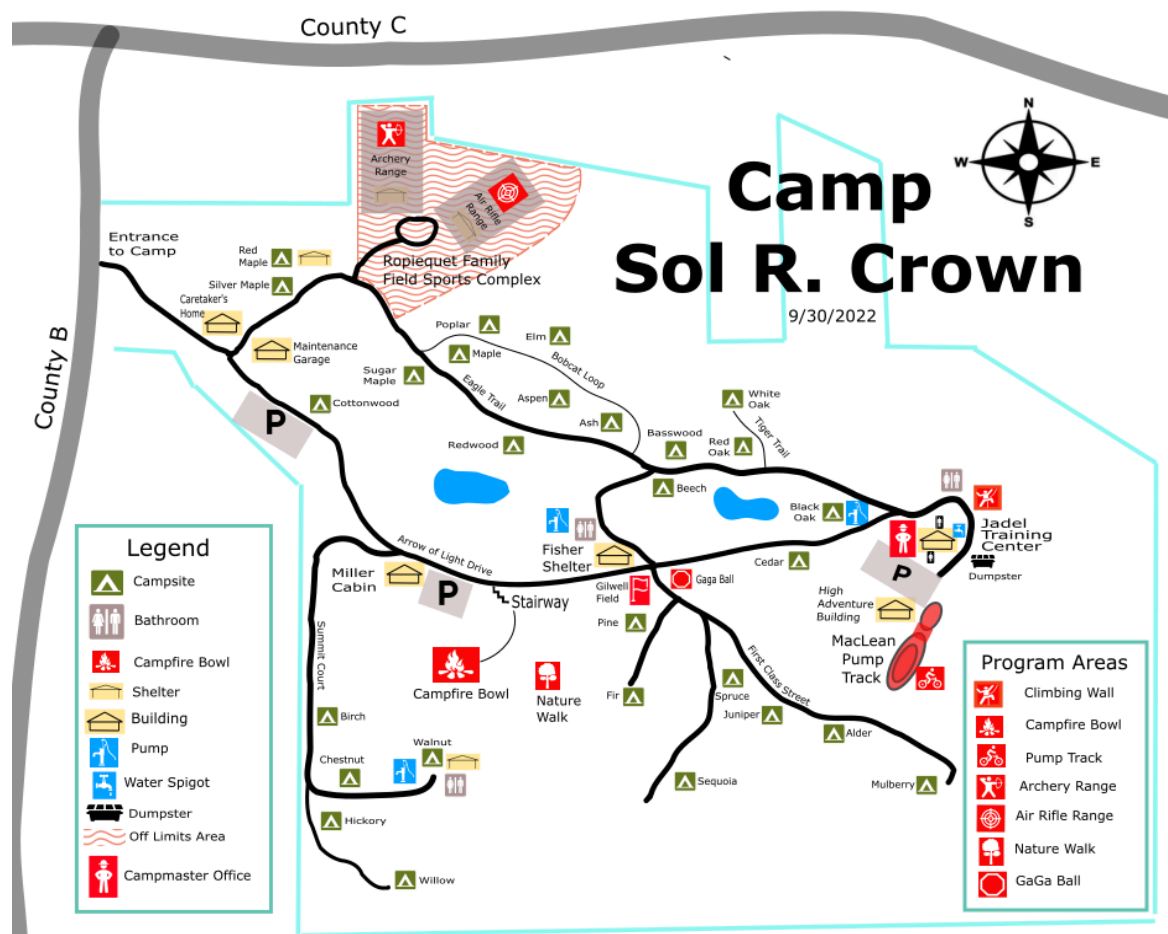
Start Time:

End Time:

Team Members:

#	Name of Tree	Location	Height & Trunk Circumference	Description (bark, leaves, shape, etc.)

Map of Camp Crown



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Tree Identification

Online & App Resources for Tree Identification

Picture This APP



Picture This PictureThis offers a powerful plant identifier to identify flowers, leaves, trees, herbs, and more in seconds!

Try 7 days free, then \$29.99/year No need to pay if you cancel the subscription at least a day before the 7-day free trial ends



LeafSnap Plant Identification



LeafSnap Plant Identification When you discover a beautiful wildflower or unusual-looking shrub, you struggle to discern its genus. Instead of wasting time trawling through websites or asking your gardener friends, why not simply take a snap and have an app do the work for you?

Leafsnap can currently recognize 90% of all known species of plants and trees, covering most of the species you will encounter in every country on Earth.

Google Lens



Google Lens You can use Google Lens to identify real-world objects with your camera and find information about plants, trees, animals and more. To use Google Lens with your iPhone camera, take a photo, tap the photo, tap the icon .

Mike Anderson's Plant and Animal Reference Book <https://app.box.com/s/k0i20x1p1zvctatygi4hsaxuxu1p3ty0>

Online Interactive Tree ID

The following key is based on the use of only the leaves and branches, since they are the simplest parts of the tree to use for identification during the summer months when trees are in full foliage. To identify your tree, you'll be making a series of choices based upon sketches, photographs, and tree characteristics. Through a process of elimination, you'll arrive at an identification of your tree. In some cases the trees have not been keyed out to the individual species.

https://naturalresources.extension.iastate.edu/forestry/iowa_trees/key/key.html

Reference: Iowa State University - Extension and Outread

Identify Tree by Leaves

The Two Major Tree Classifications

Evergreen means a tree doesn't lose its leaves during the course of the winter. Most people think of evergreen trees like pine and **Christmas trees** because evergreen trees thrive in wintry weather and dry

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
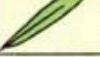


























Tree Identification

weather. Although most evergreen trees are coniferous, there are some coniferous trees like larches that do lose their leaves. Evergreen is the opposite of Deciduous.

Deciduous trees, on the other hand, lose their leaves at the end of the growing season and grows them back again typically in the spring. "Deciduous" is an adjective and means that the plant so described sheds its leaves at the end of the growing season. These are the trees that provide elegant foliage when the trees turn red, orange and yellow during the Fall season. However, there are some deciduous trees (some broadleaf trees like the live oak trees) that do not lose their leaves and keep them all year. You can think of deciduous as being the opposite of evergreen.

Reference: <https://chopdoc.com/how-to-identify-tree-by-leaves/#Leaf>

Table of Leaves

OAK		Smooth	Opp.	D	OSIER WILLOWS		Smooth Toothed	Alt.	D
BEECH HORNBEAM		Shiny Toothed	Alt.	D	SALLOW CRAB APPLE		Smooth Toothed	Alt.	D
BIRCH		Smooth Toothed	Alt.	D	PINE		Pairs	-	E
ALDER		Rough Toothed	Alt.	D	CEDAR LARCH		Bunches	-	E D
LIME HAZEL		Smooth Toothed Rough Toothed	Alt. Alt.	D D	SPRUCE		Brush	-	E
ELM		Rough Toothed	Alt.	D	YEW		Spiky	-	E
ASH ROWAN		Smooth Toothed	Opp. Alt.	D D	HOLLY HOLMOAK		Shiny leathery	Alt. Alt.	E E
SYCAMORE		leathery	Opp.	D	BOX		Shiny	Opp.	E
Field MAPLE		Smooth	Opp.	D	WHITE BEAM		Toothed White under	Alt.	D
MAPLE PLANE		Smooth leathery	Opp. Alt.	D D	WALNUT ELDER		Smooth Toothed	Opp. Opp.	D D
SWEET CHESTNUT		Shiny Toothed	Alt.	D	CHERRY BLACKTHORN		Smooth Toothed	Alt. Alt.	D D
HORSE CHESTNUT		Toothed	Opp.	D	MULBERRY		Shiny Toothed	Alt.	D
WHT. POPLAR		White under	Alt.	D	MEDLAR		Downy under	Alt.	D
BLK POPLAR ASPEN		Smooth Toothed	Alt. Alt.	D D	HAWTHORN		Shiny	Alt.	D

Opp.= Opposite Alt.= Alternate E= Evergreen D= Deciduous

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How to Identify a Tree by Bark

In case you were wondering how to identify your trees when all the leaves are gone, you can always look at the tree's bark. What you will discover is the bark of trees has a unique pattern—kind of like a fingerprint. Therefore, you will expect no two bark patterns are exactly alike. Even though some tree species have similar types of bark, they all still have their own unique identity. Because of this, you can consider identifying trees by bark to be like other types of tree identification options. All you have to do is begin with a broad category of types of tree bark and then look at other characteristics. That way, you will be able to tell slight differences in bark types that look similar.

- **Scaly:** These are trees that have square-like bark pieces that overlap each other. Sitka and Blue spruce trees have very scaly bark. Trees that have scaly bark are shagbark hickory, strawberry tree, maple and river birch. This is the best maple tree bark identification characteristic you can find out there.
- **Furrowed:** This bark is the most common type of bark out there, and this is what most people think of when you talk about tree bark. Trees in this category will have chunky vertical strips of bark that have deep grooves. Trees with this type of bark are hemlocks, Redwoods and Doug-firs.
- **Papery:** Trees with this type of bark refers that looks like white paper. It's easy to peel, and it's easy to tear off in large pieces. It's also very thin. You can see this type of bark on the Red Alder in the Pacific Northwest and on the White birch in the Northeast.
- **Smooth:** Trees with this type of bark often look like they don't have bark. Most times, you will see small plates of bark on the tree that looks a lot like camouflage. The color of smooth bark trees is usually a light tan or whitish color. Aspens and sycamores are examples of the types of trees that have smooth bark.



Reference: <https://chopdoc.com/how-to-identify-tree-by-leaves/#Leaf>

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Tree Identification

Trees at Camp Crown

Tree Name	Reference
American Beech	https://en.wikipedia.org/wiki/Fagus_grandifolia
Amur Honeysuckle	https://en.wikipedia.org/wiki/Lonicera_maackii
Black Walnut	https://en.wikipedia.org/wiki/Juglans_nigra
Box Elder	https://en.wikipedia.org/wiki/Acer_negundo
Burr Oak	https://en.wikipedia.org/wiki/Quercus_macrocarpa
Common Buckthorn	https://en.wikipedia.org/wiki/Rhamnus_cathartica
Eastern Red Cedar	https://en.wikipedia.org/wiki/Juniperus_virginiana
Eastern Cottonwood	https://en.wikipedia.org/wiki/Populus_deltoides
Eastern White Pine	https://en.wikipedia.org/wiki/Pinus_strobus
Ginkgo biloba	https://en.wikipedia.org/wiki/Ginkgo_biloba
Jack Pine	https://en.wikipedia.org/wiki/Jack_pine
Northern Red Oak	https://en.wikipedia.org/wiki/Quercus_rubra
Northern White Cedar	https://en.wikipedia.org/wiki/Thuja_occidentalis
Northern White Sumac	https://en.wikipedia.org/wiki/Sumac
Ohio Buckeye	https://en.wikipedia.org/wiki/Aesculus_glabra
Red Alder	https://en.wikipedia.org/wiki/Alnus_rubra
Red Pine	https://en.wikipedia.org/wiki/Pinus_resinosa
Rocky Mountain Juniper	https://en.wikipedia.org/wiki/Juniperus_scopulorum
Shumard Oak	https://en.wikipedia.org/wiki/Quercus_shumardii
Slippery Elm	https://en.wikipedia.org/wiki/Ulmus_rubra
Smooth Sumac	https://en.wikipedia.org/wiki/Rhus_glabra
White Mulberry	https://en.wikipedia.org/wiki/Morus_alba

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Appendix - Tree Locations at Camp Crown by GPS

Reference: "Picture This" Tree ID App

Reference: Commander Compass Go 3.11

location: GPS American Beech@ 42.505787 -88.171244 (241.108456)

spyglass://location?n=GPS%20American%20beach&lat=42.505787&lon=-88.171244&alt=241.108456&data=track

location: GPS Black Walnut@ 42.505019 -88.171580 (218.650852)

spyglass://location?n=GPS%20black%20walnut&lat=42.505019&lon=-88.171580&alt=218.650852&data=track

location: GPS Black Walnut@ 42.506736 -88.167563 (230.577120)

spyglass://location?n=GPS%20Black%20Walnut&lat=42.506736&lon=-88.167563&alt=230.577120&data=track

location: GPS Box Elder@ 42.506426 -88.170133 (222.010696)

spyglass://location?n=GPS%20box%20elder&lat=42.506426&lon=-88.170133&alt=222.010696&data=track

location: GPS Buckthorn@ 42.506337 -88.170261 (228.767252)

spyglass://location?n=GPS%20Buckthorn&lat=42.506337&lon=-88.170261&alt=228.767252&data=track

location: GPS Burr oak@ 42.506234 -88.169286 (233.944722)

spyglass://location?n=GPS%20Burr%20oak&lat=42.506234&lon=-88.169286&alt=233.944722&data=track

location: GPS Eastern cottonwood@ 42.506123 -88.170010 (234.554921)

spyglass://location?n=GPS%20Eastern%20cottonwood&lat=42.506123&lon=-88.170010&alt=234.554921&data=track

location: GPS Eastern Red Cedar@ 42.505096 -88.169883 (236.364385)

spyglass://location?n=GPS%20Eastern%20Red%20Cedar&lat=42.505096&lon=-88.169883&alt=236.364385&data=track

location: GPS Eastern Red Cedar@ 42.506188 -88.169383 (239.634989)

spyglass://location?n=GPS%20Eastern%20Red%20Cedar&lat=42.506188&lon=-88.169383&alt=239.634989&data=track

location: GPS Eastern white pine@ 42.504164 -88.169817 (237.850176)

spyglass://location?n=GPS%20Eastern%20white%20pine&lat=42.504164&lon=-88.169817&alt=237.850176&data=track

location: GPS Ginkgo@ 42.505204 -88.170959 (244.390376)

spyglass://location?n=GPS%20Ginkgo&lat=42.505204&lon=-88.170959&alt=244.390376&data=track

location: GPS Honeysuckle@ 42.506423 -88.169896 (231.521148)

spyglass://location?n=GPS%20Honeysuckle&lat=42.506423&lon=-88.169896&alt=231.521148&data=track

location: GPS Jack Pine@ 42.506630 -88.170037 (221.086014)

spyglass://location?n=GPS%20Jack%20pine&lat=42.506630&lon=-88.170037&alt=221.086014&data=track

location: GPS Juniper@ 42.506483 -88.169888 (232.990581)

spyglass://location?n=GPS%20Juniper&lat=42.506483&lon=-88.169888&alt=232.990581&data=track

location: GPS Northern Red Oak@ 42.506662 -88.167473 (230.377039)

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spyglass://location?n=GPS%20Norther%20Red%20Oak&lat=42.506662&lon=-88.167473&alt=230.377039&data=track
location: GPS Northern Red Oak@ 42.504995 -88.171366 (248.914984)

spyglass://location?n=GPSNorthern%20red%20oak&lat=42.504995&lon=-88.171366&alt=248.914984&data=track

location: GPS Northern white Cedar@ 42.505476 -88.169785 (243.143666)

spyglass://location?n=GPS%20Northern%20white%20Cedar&lat=42.505476&lon=-88.169785&alt=243.143666&data=track

location: GPS Red pine@ 42.506231 -88.169509 (249.019696)

spyglass://location?n=GPSred%20pine&lat=42.506231&lon=-88.169509&alt=249.019696&data=track

location: GPS Red Pine@ 42.506183 -88.169316 (232.388925)

spyglass://location?n=GPS%20Red%20Pine&lat=42.506183&lon=-88.169316&alt=232.388925&data=track

location: GPS Rocky Mountain Juniper@ 42.506446 -88.169875 (229.966805)

spyglass://location?n=GPS%20rocky%20mountain%20juniper&lat=42.506446&lon=-88.169875&alt=229.966805&data=track

location: GPS Slippery Elm@ 42.507132 -88.169909 (232.828320)

spyglass://location?n=GPS%20slippery%20elm&lat=42.507132&lon=-88.169909&alt=232.828320&data=track

location: GPS Shumard Oak@ 42.505485 -88.170104 (227.002163)

spyglass://location?n=GPS%20shunard%20Oaf&lat=42.505485&lon=-88.170104&alt=227.002163&data=track

location: GPS Smooth Sumac@ 42.505552 -88.170232 (251.832334)

spyglass://location?n=GPS%20smooth%20sumac&lat=42.505552&lon=-88.170232&alt=251.832334&data=track

location: GPS White Mulberry@ 42.506126 -88.169824 (234.728473)

spyglass://location?n=GPS%20white%20Mulberry&lat=42.506126&lon=-88.169824&alt=234.728473&data=track

location: GPS Wild Mulberry@ 42.505355 -88.170947 (243.538812)

spyglass://location?n=GPS%20Wild%20Mulberry&lat=42.505355&lon=-88.170947&alt=243.538812&data=track

TWM

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Comments and Suggestions to: NEICOutdoor@gmail.com

