

IdenTreeFier: User Guide

SFWRENG 3A04

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1. Introduction to IdenTreeFier

IdenTreeFier is a mobile application developed for Android devices. It enables a user to identify a tree based on the tree's properties, such as leaf and bark characteristics. A physical specimen of the tree is helpful in analyzing the tree's characteristics, so this application should be primarily used in the field. However, IdenTreeFier is able to be used anywhere at your convenience. Simply pick up a leaf, and start IdenTreeFying!

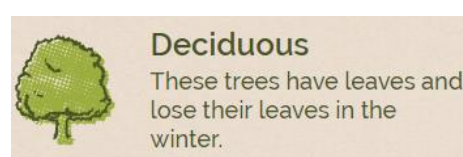
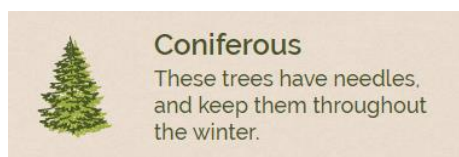
2. Getting Started

Once the IdenTreeFier app is installed, open it up. Enabling location permissions is recommended, as it can help narrow down results when identifying a tree.

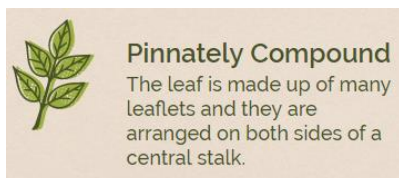
3. Identifying a Tree

IdenTreeFier will take you through a list of multiple choice questions that it will use to determine possible candidates for the tree in question. If you are unfamiliar with dendrology (the study of trees), the rest of the guide has some help on some of the terms used in the app.

Q1. Coniferous or Deciduous?



Q2. Leaflet Arrangement



Q3. Leaf Grouping



Simple

Just one leaf, undivided.



Compound

The leaf is composed of many leaflets.

Q4. Edge of the Leaf



Smooth

The leaf edges are smooth or the lobes of the leaf are wavy.



Rough

The leaf edges are toothed or the lobes of the leaf are pointy.

Q5. Lobes or No Lobes?



Lobed

The leaves have lobes.



No Lobes

The leaves do not have lobes.

Q6. Blade Structure



Narrow

Leaves longer than they are wide.



Broad

Leaves wider at the base than the tip.

Q7. Leaf Base



Symmetrical

The base of the leaf starts at the same spot on both sides of the stem.



Asymmetrical

One side of the base is lower than the other side.

Q8. Leaf Shape



Palmate

The leaf is shaped like the palm of your hand, spread open.



Sinuate

The leaf has strongly wavy edges.



Oval

The leaf shape is mostly oval.



Heart

The base of the leaf is rounded and the shape resembles a heart.



Triangular

The leaf base is mostly flat while the tip of the leaf forms a triangle.

Q9. Needles or Scales?



Needles

The needles are attached to the stem, either in bundles or singly.



Scales

The leaves are overlapping scales.

Q10. Needle Bundles



Single

Just one needle, no bundles.



2 Needles

Two needles in the bundle.



3 Needles

Three needles in the bundle.



5+ Needles

Five or more needles in the bundle.