Tree Identification for Easy Identification

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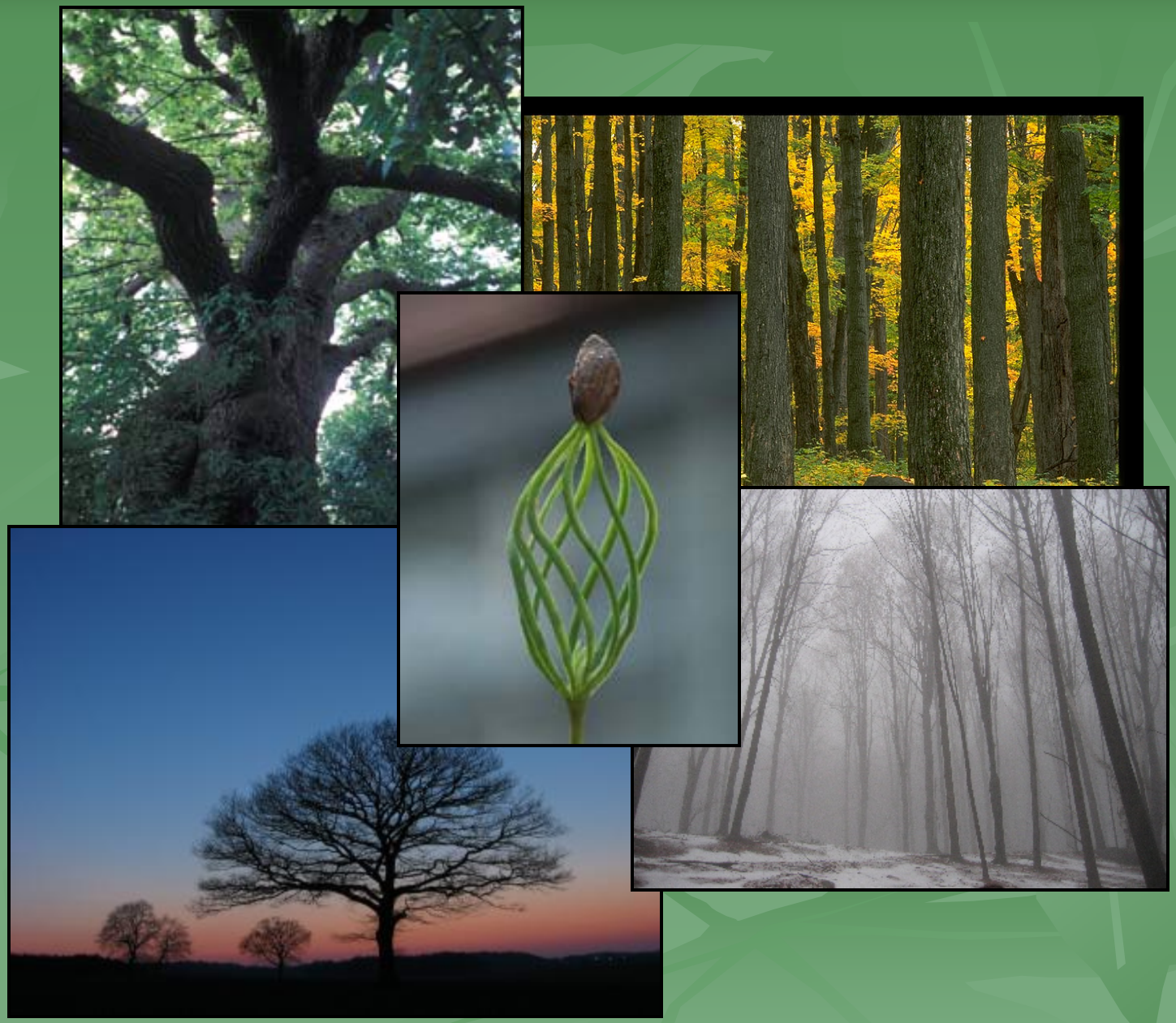
With so many species of trees…

How do we learn how to identify each of them for our needs?

Let us start with something we are familiar with…

Characteristics

Something that distinguishes or identifies an individual…



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Season of the year!

Leaves – on - Method

Broadleaf

Conifer

Conifers

Needles per bundle

(2 - 3 - 5)

Flattened

White pine
(5)

Pitch pine (3)

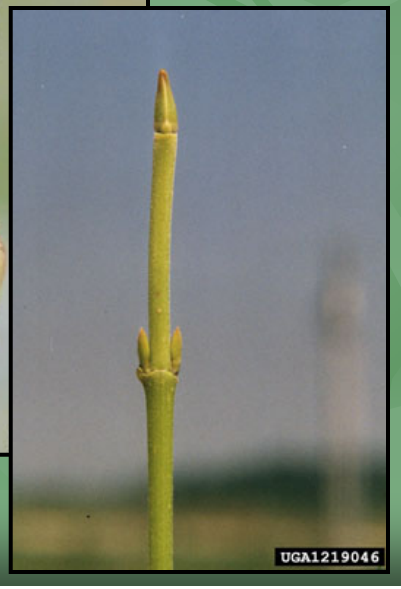
Virginia pine (2)

Broadleaf

Arrangement of leaves and buds

Alternate branching

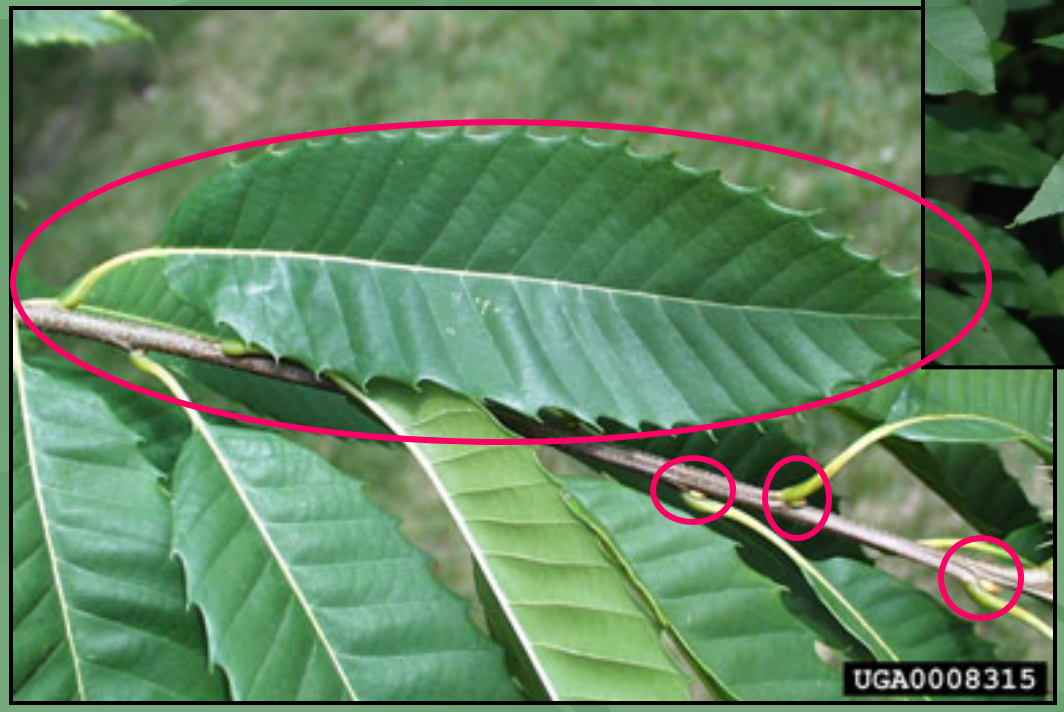
Opposite branching



Form of the leaf

Compound

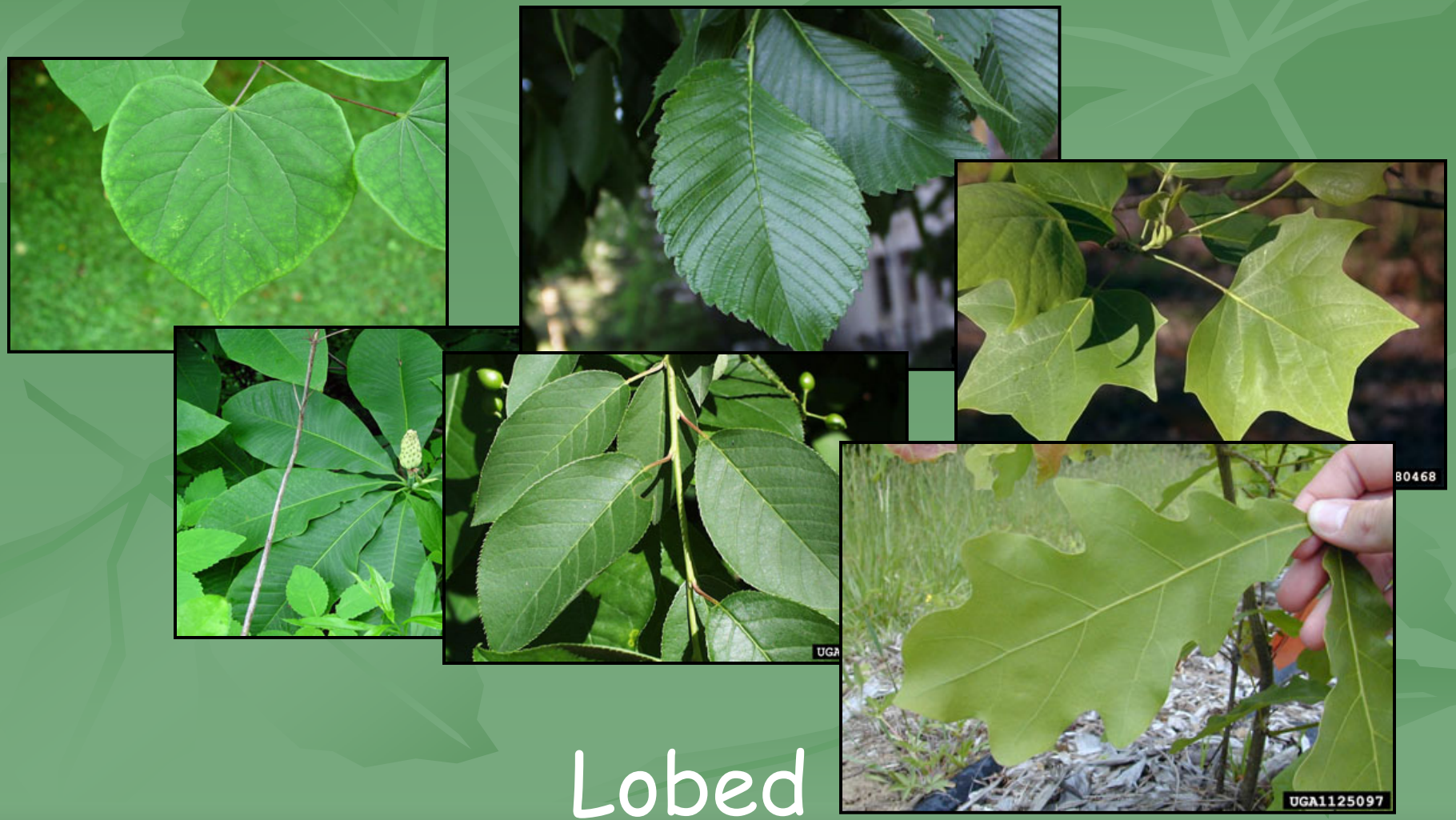
Simple



Margins

Entire (or unlobed)

Serrated



Lobed

TEST TIME! (1)

Conifer or broadleaf?

Opposite or alternate?

TEST TIME! (2)

Simple or Compound?

Alternate or Opposite?

TEST TIME! (3)

Margins!

Serrated or Lobed?

Entire or Lobed?

In the process of identifying trees, there is a logical sequence to identify the correct tree…

The "instrument" that is used to select the correct tree is a ***dichotomous key*** .

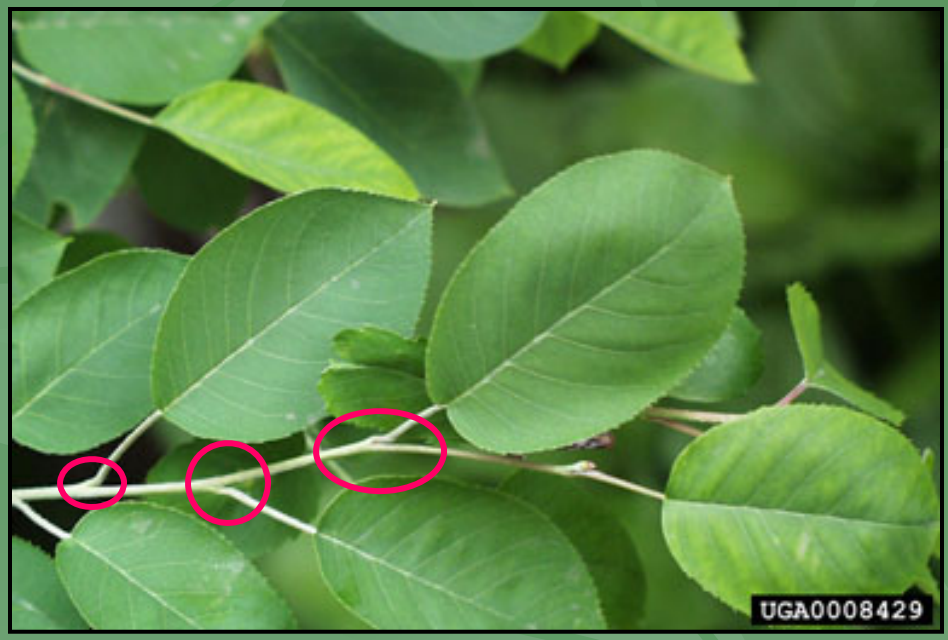
What is a *dichotomous key?*

A process in which to identify an organism based on a series of choices –

two choices at a time!

Example!

…of a dichotomous key for tree identification

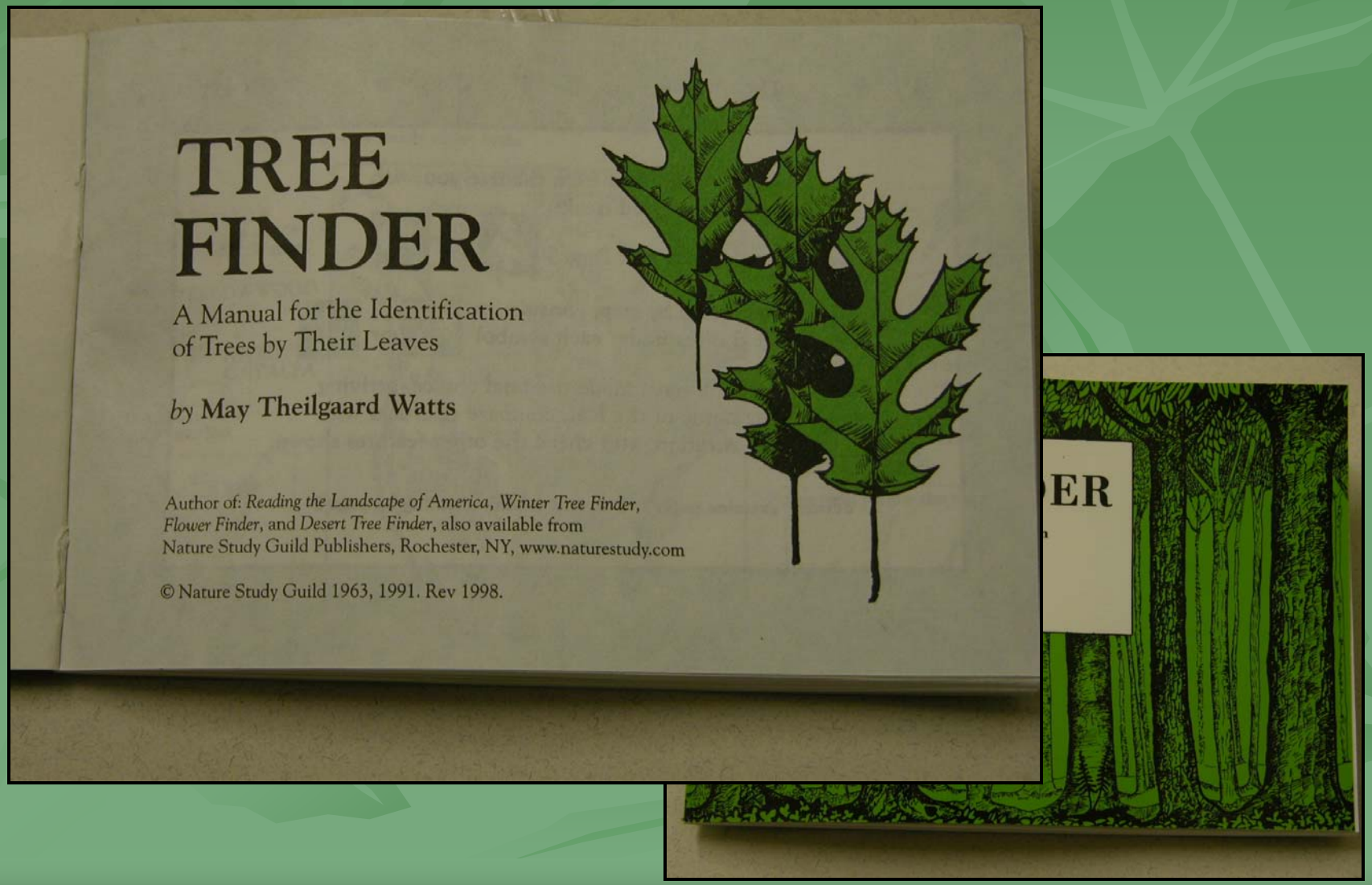


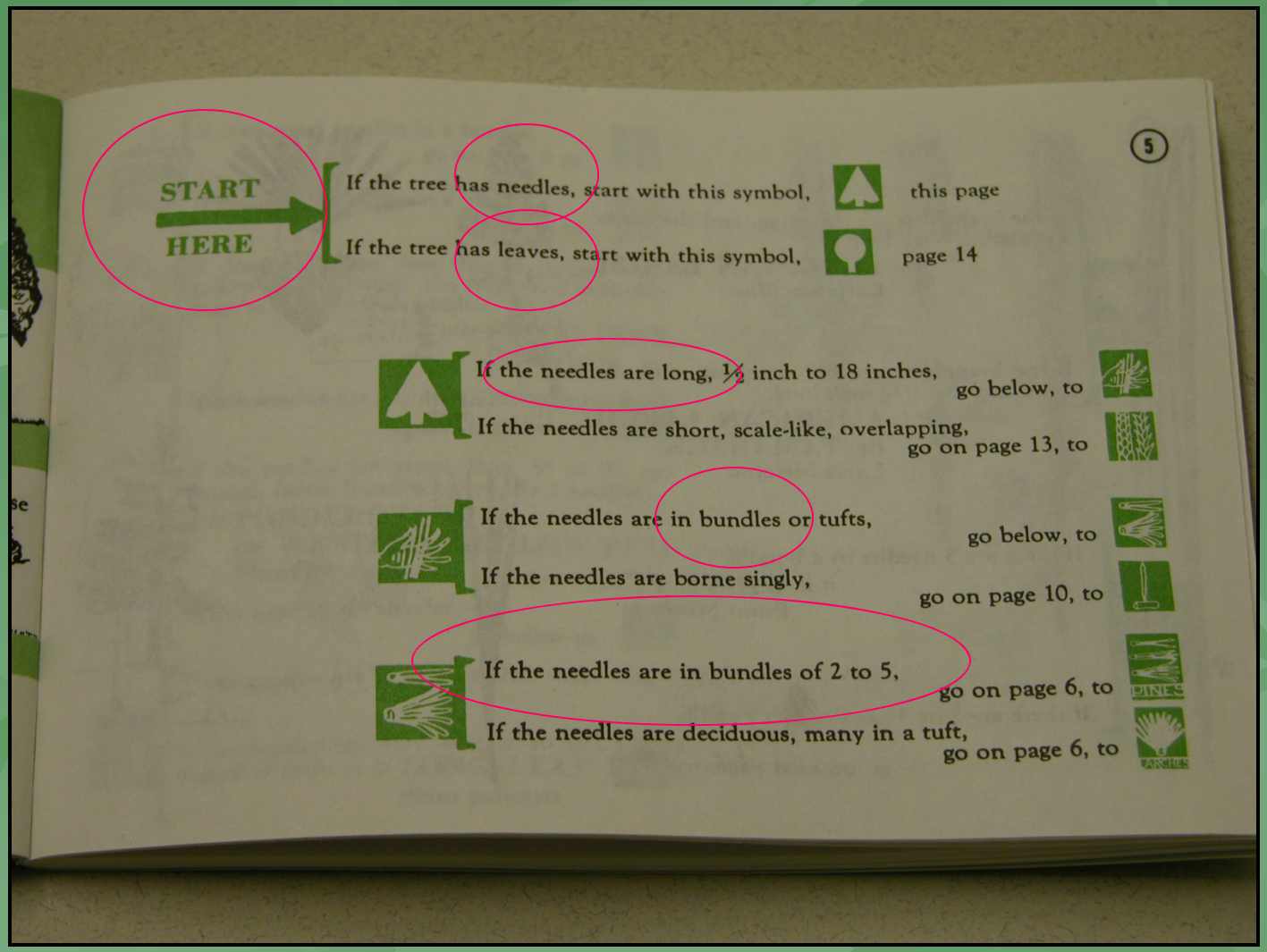
A. Does the tree have LEAVES – if so, GO TO B

A. Does the tree have NEEDLES – if so, GO TO C

B. Is the branching pattern OPPOSITE – if so GO TO D
B. Is the branching pattern ALTERNATE – if so GO TO E

Dichotomous tree finder





START HERE

If the tree has needles, start with this symbol, this page

If the tree has leaves, start with this symbol, page 14

5

If the needles are long, 1½ inch to 18 inches, go below, to

If the needles are short, scale-like, overlapping, go on page 13, to

If the needles are in bundles or tufts, go below, to

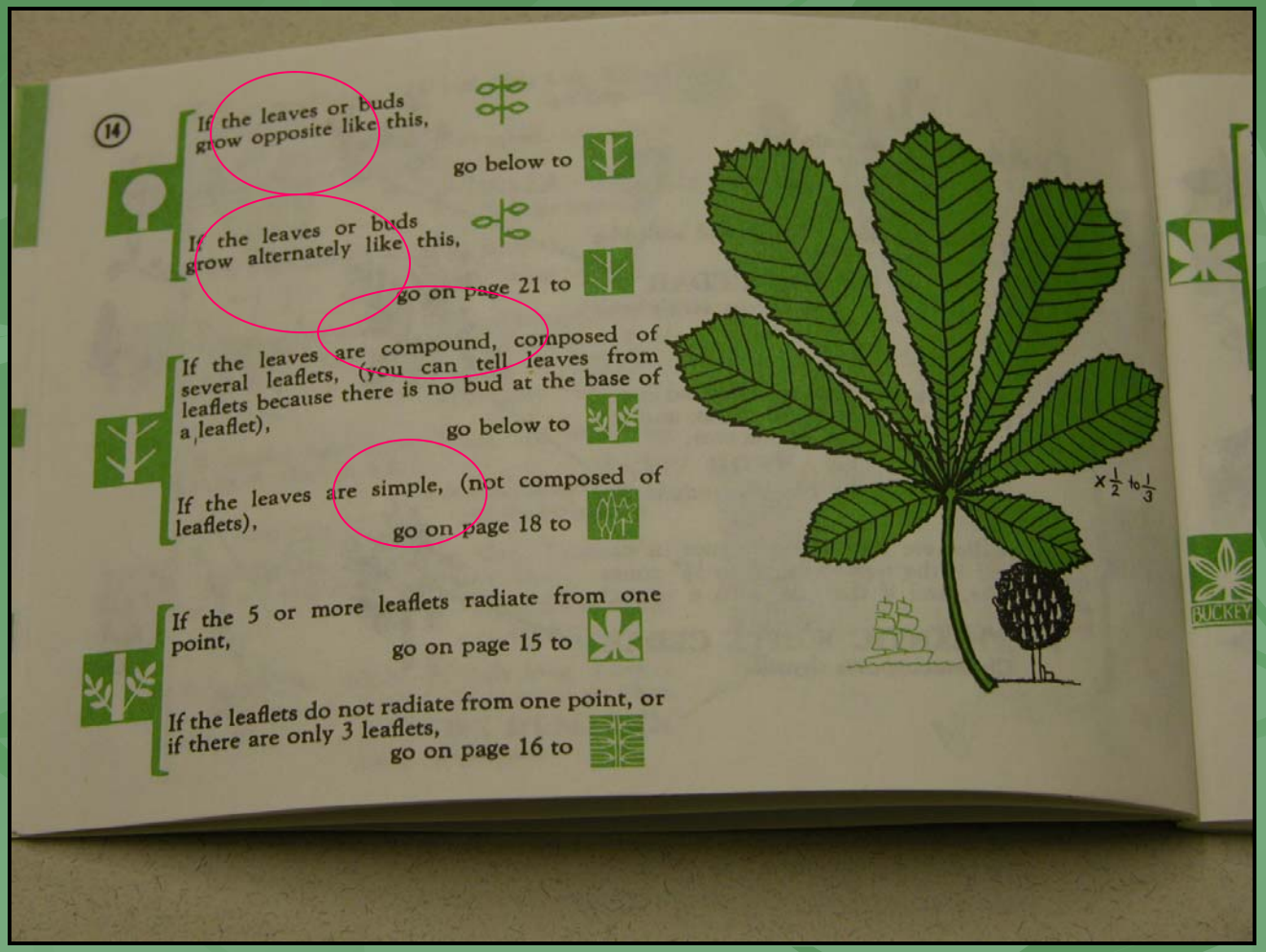
If the needles are borne singly, go on page 10, to

If the needles are in bundles of 2 to 5, go on page 6, to

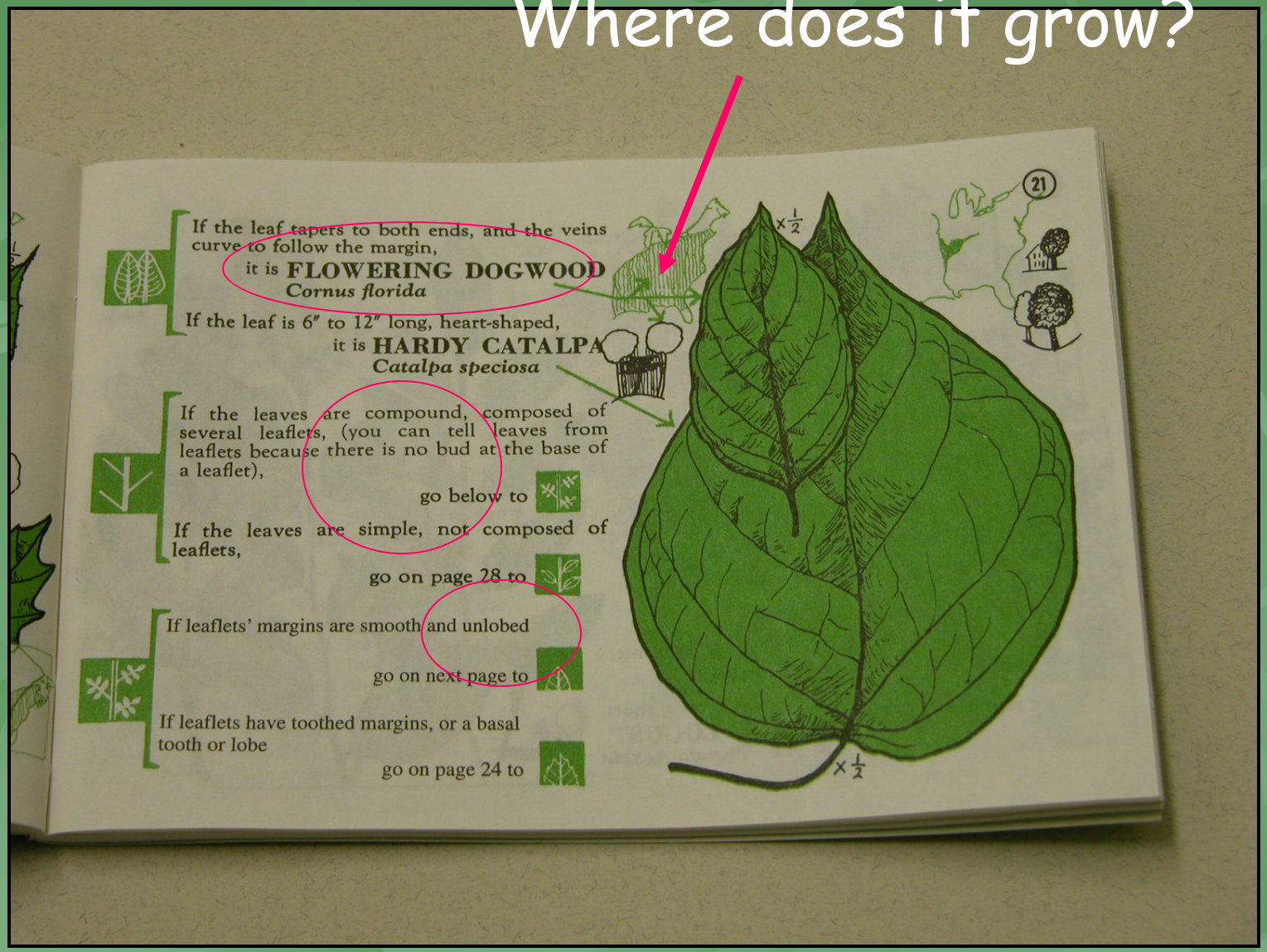
If the needles are deciduous, many in a tuft, go on page 6, to

PINES

ARCHES


14
If the leaves or buds grow opposite like this,
go below to
If the leaves or buds grow alternately like this,
go on page 21 to
If the leaves are compound, composed of several leaflets, (you can tell leaves from leaflets because there is no bud at the base of a leaflet),
go below to
If the leaves are simple, (not composed of leaflets),
go on page 18 to
If the 5 or more leaflets radiate from one point,
go on page 15 to
If the leaflets do not radiate from one point, or if there are only 3 leaflets,
go on page 16 to
BUCKEYE

Where does it grow?



Dichotomous Tree Finder

An abbreviated example

A. Does the tree have NEEDLES…Go To D

A. Does the tree have LEAVES…Go To B

B. Are the leaves SIMPLE…Go To C

B. Are the leaves COMPOUND…Go To C

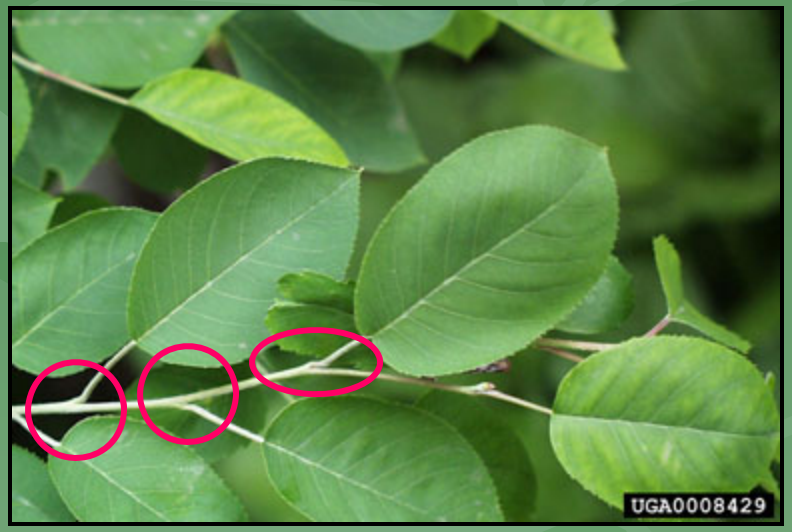
C. Is the branching OPPOSITE…Go To E

C. Is the branching ALLTERNATE…Go To F

D. Probably a conifer

E. Probably a maple or ash

F. Service berry Amelanchier canadensis



Websites and Resource Lists:

ukforestry.org (Staff - Doug McLaren)

Tree Finder by May Theilgarrd Watts

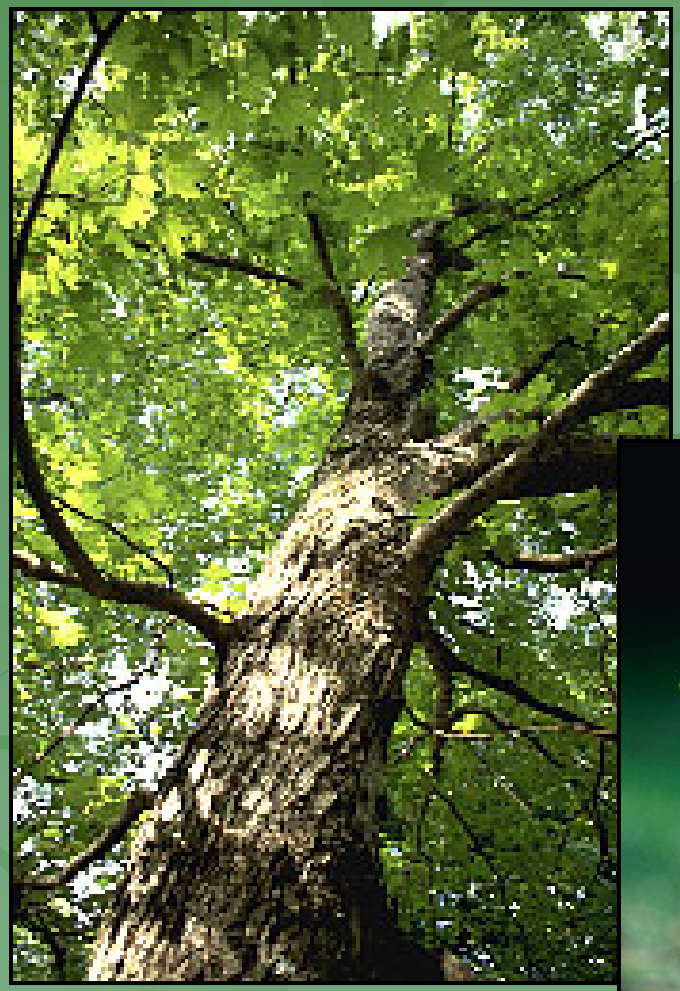
plants.usda.gov/index.html

www.dnr.state.wi.us/org/caer/ce/eek/veg/treekey/

www.cnr.vt.edu/dendro/dendrology/idit.htm

tenn.bio.utk.edu/vascular/vascular.html

www.forestryimages.org/



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