Florida Conference of Seventh-day Adventists
Florida Conference Brigade, Medical Cadet Corps
351 S State Rd 434, Altamonte Springs, FL 32714

Edible Wild Plants of Florida

Cardinal Edibility Rule

The cardinal edibility rule is to never eat any wild plant unless it has met the two following requirements:

1a. The plant has been positively identified.

1b. The plant is known to be edible.

These two requirements generally follow common sense. To the untrained eye, distinguishing traits of plants may go undetected such that a poisonous plant may be consumed accidently. This is oftentimes the case for plants where edible plants mimic the appearance of poisonous plants to warn wise consumers not to eat the edible plant as a defense mechanism. Unfortunately, the converse situation can be the case where a person eats the poisonous plant instead of the edible plant and ended up regretting it due to becoming very sick or in the moment before they died.

Furthermore, even if the two requirements of the cardinal edibility rule have been met, for the purposes of this course the following requirement is to be added.

1c. The proper preparation and edibility restrictions of the plant must be known.

This follows as some plant, though edible, can still cause medical complications. An example of this are dandelion greens. If too many are consumed at once, diarrhea may result. Other plants with medicinal properties may cause complications to those with medical conditions or if consumed too often. Licorice, for example, raises blood pressure and may help relieve headaches but could be dangerous to those with heart conditions or with high blood pressure.

For all intents and purposes of this course, another rule has been added.

2. Wild mushrooms are not to be consumed.

Some mushrooms are edible, but it is very difficult to properly identify some species as mushrooms more so than plants tend to have mimicry “twins” as defense mechanisms. Also, if a mistake in identification is made, the consequences more oftentimes result in death than with plants.

Categorizing Plants

To be able to identify an edible wild plant, a rudimentary understanding of the biological characteristics of plants needs to be understood. Specifically, the edibility and/or poisonous properties associated with plants generally can be categorized by plant families, but to do so an understanding of plant growth habit and the parts of a plant is required.

Footnote: The completion of this training fulfills the requirements for the Pathfinder Edible Wild Plants honor.

Parts of a Plant

As this is not a formal biology class, the rigorous study of anatomy and physiology of plants or an introduction to botany is not going to be covered here. However, a good place to start is the study of a familiar plant: a dandelion.

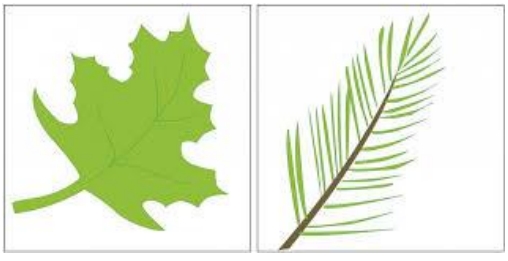
A dandelion is composed of the following parts: the flower, the stem, the greens (aka the leaves), and the roots. The flower itself could be considered to be the most complex part of the plant as it changes the most with time; it starts out as a bud, and then the bud opens into a flower, and then after pollination the flower turns into a seed head. Furthermore, while the dandelion flower itself has the stamen/pistols (the pollen producing/receiving parts), the petals (the colorful part), the sepals (the green things that can look like petals at the back of the flower), and the heart/base of the flower (aka the receptacle just under where the stamen/pistols connect to). In addition, the pollen (the "dust" on the ends of the stamen) and the sap (plant "blood") sometimes play a role as well.

The reason for this crash course on the parts of edible wild plants is because not all parts of edible wild plants are necessarily edible. A classic example of this would be the tomato, as the fruit is edible but all the other parts of the plant are poisonous. Another consideration on this note is the age of the plant. For example, dandelions are entirely edible though it is recommended to eat them when they are younger (before blooms/early blooms) as they are not supposed to be as bitter.

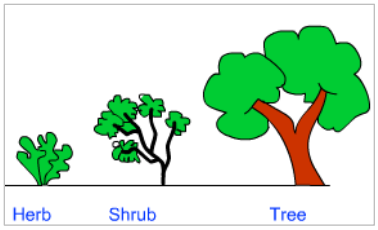
Plant Growth Habit Groupings

Many field guides for identifying edible wild plants group the plants by plant growth habit groupings. Just like reptiles, amphibians, rodents, fish, birds, and etc. are separated in the animal world, plants can be separated by their general characteristics and then further described by narrowing down the specifics.

Trees, Shrubs, and Palms

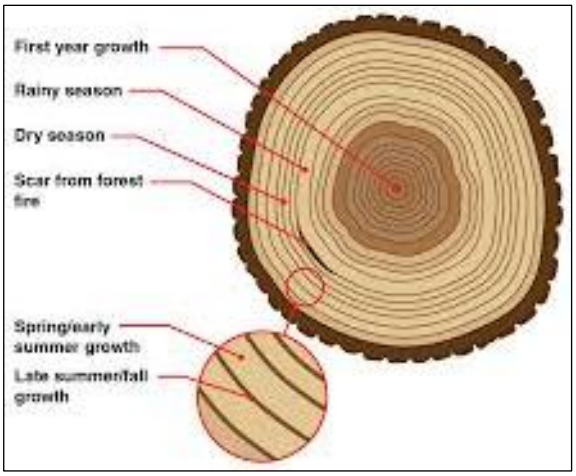


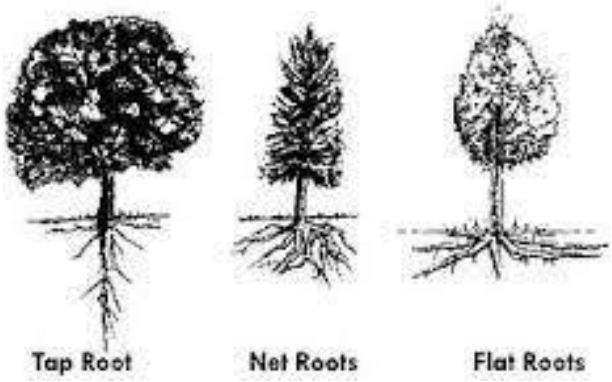
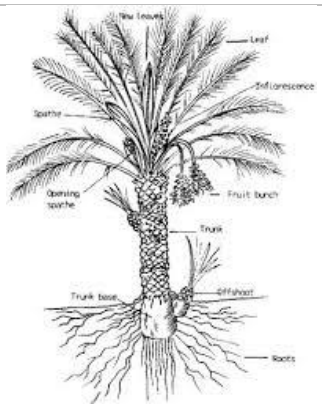
Trees are largely defined by height and having a singular trunk (instead of a stem) that splits off into branches. Trees are often further narrowed down into if they are coniferous/evergreens/needle leaf or deciduous/broad leaf categories.



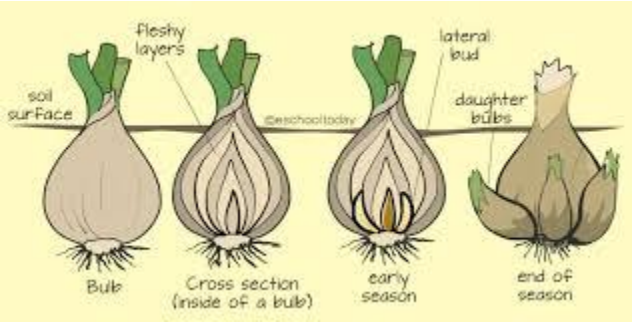
Shrubs can easily be distinguished from trees as shrubs tend to have multiple trunks and typically are shorter and more bush-like. However, some trees can also be categorized off of shrubs depending on how they were trained to grow, such as the case with the Crepe Myrtle Tree.

Palms happen to be completely separate from other trees for several reasons. Two morphological differences include palms do not form annual growth rings and palms have a fibrous root system characteristically (palms are monocotyledons/monocots while trees are dicotyledons/dicots. For this reason, the categorization offered here separates out palms as a separate category from trees or shrubs.

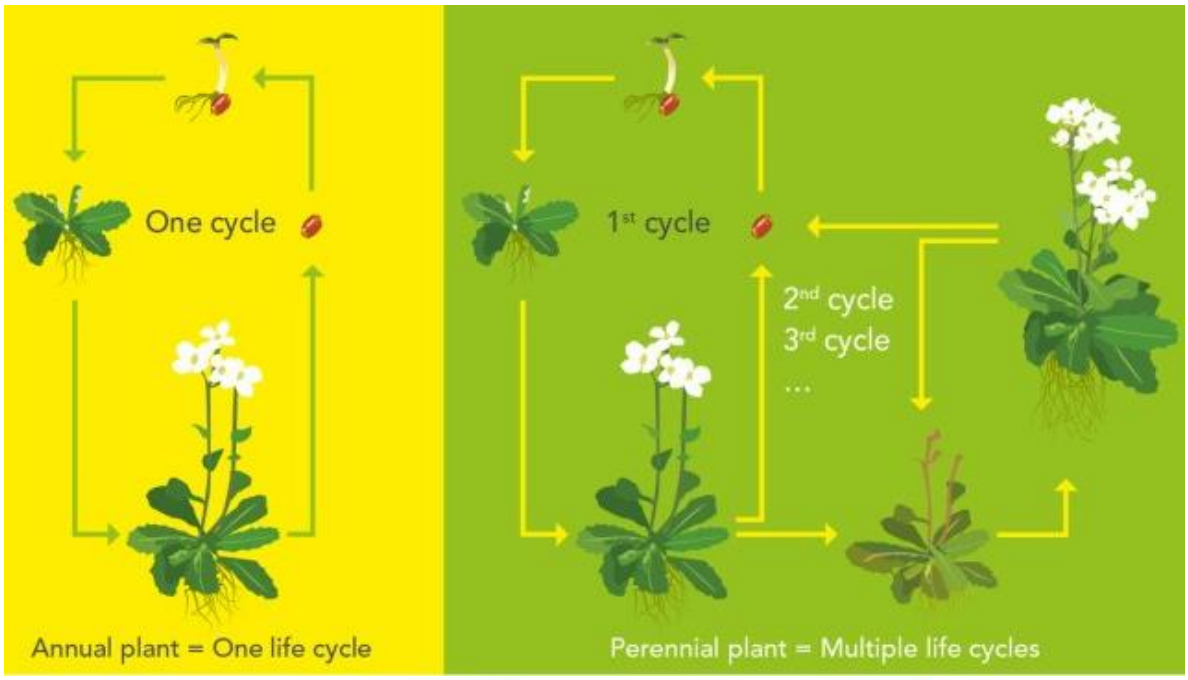


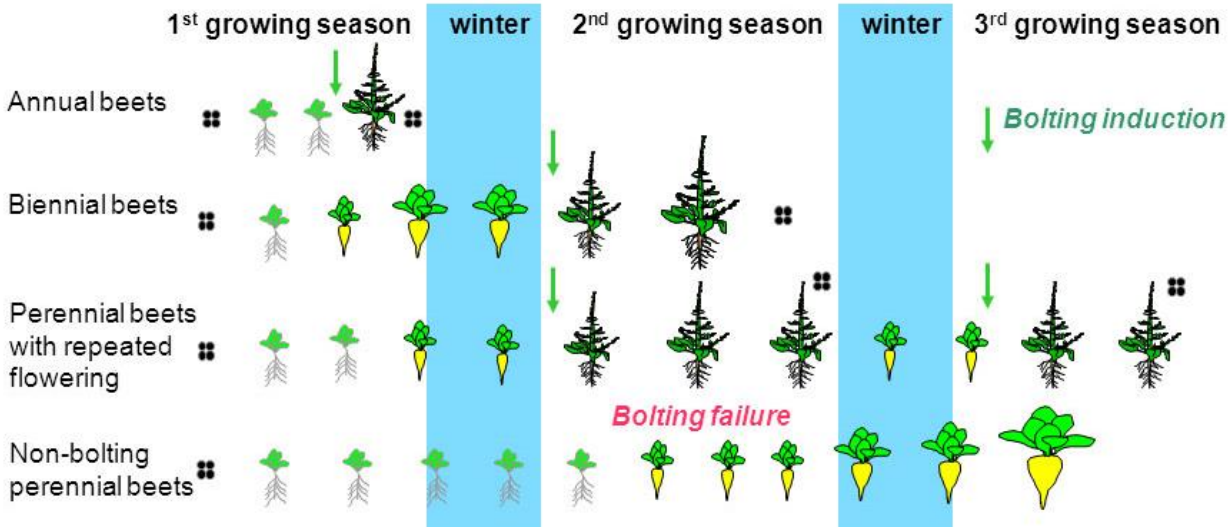
Trees	Palms
	

Herbs: Annuals, Biennials, and Perennials



The smallest of the plants, such as most "weeds" are categorized based off of how long the plant tends to be alive. Annual plants are defined by their short growth cycle which includes the seeds germinate, grow, flower, reproduce, and die off generally within the same year and hence the term, annual. Perennials start off the same as annuals, but instead of dying off every year go dormant or "sleep" through the winter season and revive the following spring, and hence the root of the word is the same as persistent. Biennials (bi = two and annual = year) are an in between the annuals and the perennials as they stick around for a few years before they die off, in addition to another special characteristic—they tend to have bulbs.





Specialty Categories

Some plants tend to be so unique that they are categorized off of a defining characteristic. Aquatic plants grow in water. Vines climb onto the environment in which they grow and need another support structure to define their shape (like trees, chain link fences, etc.). Cacti and succulents are known for having very plump stems/foliage due to their ability to store water and can have spines (modified leaves). Other categories besides these do exist (air plants, lichens, mosses, liverworts, “fungi”, and etc.) but for the purposes of this class, edible wild plants are not identified from other groups.

Plant Families

Beyond just plant growth habit groupings, scientists have specified plant identification characteristics even further to group things into families. With some experience, learning plant families help with identification as many families are consistently edible or consistently poisonous. However, some families in particular have both edible and poisonous parts so identifying the specific species and proper part for the family is necessary. Six plant family examples of having both edible and poisonous parts follow below.

- **Nightshade family** (Solanaceae) - nightshade, tomato (leaves), potato (leaves)
- **Carrot/parsley family** (Apiaceae) - Water hemlock, Poison hemlock or fool's parsley
- **Rose family** (Rosaceae) (other than: Apples, Pears, Hawthorn, Blackberry, Raspberry, Rose hops, etc. fruits) - cherry (leaves, seeds, bark)
- **Daisy family** (Asteraceae/Compositae) (other than: Asters, Balsam root, Burdock, Chamomile, Chicory, Dandelion, Golden rod, Jerusalem artichoke, Oxeye daisy, Pineappleweed, Prickly lettuce, Salsify, Sow thistle, Thistle, Wild lettuce, Wild sun flower, etc.) - white snake root
- **Legume family** (Fabaceae) - Goat's rue, indigo, locust (seed pods), Lupine, Rattlebox
- **Lily family** (Liliaceae)(other than: Avalanche lily, Camas, Day lily, Desert lily, Dogtooth violet, Indian cucumber, Leek, Tiger lily, Wild garlic, Wild onion, Yellow bells, etc.) - False Hellebore, Fly Poison, Star of Bethlehem (*pictured*), Deathcamas

Preparation Methods

As with any raw ingredient, there are many ways to prepare edible wild plants such that they can end up composing a meal. The most obvious method is to eat the edible wild plant raw, however, with some edible wild plants cooking is required to make them tasty or even edible.

Some of the methods for preparing edible wild plants includes the following:

a. Boiling
b. Roasting
c. Frying
d. Baking
e. Flour

Edible wild plants often are versatile with multiple parts that can be prepared in different ways. For example, pine trees have nuts that are edible raw and can be roasted, the needles can be boiled to make tea, and the sap can be chewed and spat out like bubblegum. Also, dandelions are very versatile as the roots, stem, greens, and the flower. Though cooked greens and fried dandelion flower fritters may be more obvious recipes, the roots can be roasted to make a caffeine free coffee substitute (learn more at https://youtu.be/Tqc3wsff36Q).

Making Flour

Of all the different preparation methods for edible wild plants, making flour is generally the most complicated. Typically, flour as it is known is made from grains, such as wheat or rice flour, but it can also be made from nuts (coconut, etc.) and roots (tapioca, etc.). This is generally a labor intensive process, which may be even more so if the edible wild plant requires boiling/steeping of the flower to make it palatable or safe to eat. An example of this would be acorns from any oak tree. Though they are edible, the flour requires boiling or steeping out the tannins which makes the flour bitter.

Exercises

1. Sort the Florida Edible Wild Plant flashcards into different piles for the following:
   - Plant Growth Habit Grouping
   - Nutrition Category (fruit, vegetable, nut, etc.)
   - Edible Preparation Method

2. Identify the edible plant from the picture.

3. If available, go find, collect, prepare, and consume edible wild plants.

Bible

Answer the following questions by looking up the verses.

1. What was created each day of creation and on which day were plants created? (Genesis 1-2)

2. What was the original diet in the Garden of Eden? (Genesis 1:29-30, 2:15-27)

3. What was the diet after the fall? How is it different from before the fall? (Genesis 3:17-19)

4. What was the diet after the Flood? How is it different from before the flood? (Genesis 6:18-22; 7:1-5; 8:17-20; 9:1-7)

5. What are the distinguishing characteristics for clean and unclean foods?
    a. Leviticus 11
    b. Deuteronomy 14

6. Discuss how the following New Testament passages relate to diet and foods.
    a. John the Baptist's diet (Matthew 3:4, for commentary on locusts: http://bibletools.info/Matt_3.4)
    b. Jesus feeding the 5,000 (Matthew 14:13-21; Mark 6:31-44; Luke 9:12-17; John 6:1-14) and Feeding the 4,000 (Matthew 15:32-39; Mark 8:1-9)
    c. Defiling Food (Mark 7)
    d. Peter's Sheet (Acts 11, with context of the whole chapter)
    e. What Gentiles were to do (Acts 15:20, 29 in context of the chapter)

List of Florida Edible Wild Plants

1. Clover/Wood sorrel - tea, green. Annual.
2. Dandelions- tea, green. Annual.
3. Beautyberries- fruit. Shrub.
4. Armenian Blackberries- fruit, tea. Vine.
5. Maypops/Passion Fruit- fruit. Vine.
6. Gopher Apple- fruit. Shrub.
7. Eastern Prickly pear- fruit, pads. Cactus.
8. Persimmons- fruit. Tree.
9. Citrus- fruit. Tree.
10. Cabbage Palm- heart. Palm.
11. Pickerel weed- root. Water plant
12. Fragrant Water Lily or American Water Lily- cooked young leaves, cooked flowerheads, cooked seeds. Water plant.
13. Yellow Water Lily- cooked roots (starch), cooked young leaves, parched seeds. Water plant.
14. Cattails- green, root. Water plant.
15. Dollar weed- green. Annual.
16. Acorns/Oak trees- nut flour. Tree.
17. Pine tree- nuts. Tree.
18. Galberry- tea. Shrub.
19. Yaopon- tea. Shrub.
20. Purselane- green. Annual.
21. Coconut- nut. Palm.
22. Coontie/Florida Arrowroot- root. starch post fermentation. Shrub.
23. Everglades Tomato- fruit. Annual.
24. Fox grapes- fruit. Vine.
25. Spiderwort/Hurricane Flower- flowers, stems, leaves, sap insect bite relief. Perennial.
26. Saw Palmetto- heart. Shrub.
27. Betony or Florida Hedge Nettles or Wild Radish. Roots. Annual.

Edible Wild Plants Flash Cards

Clover/Wood sorrel - tea, green. Annual.



Dandelions- tea, green. Annual.
More detail found on Amazing Discoveries' video. https://youtu.be/Tqc3wsff36Q


Beautyberries- fruit. Shrub.


Armenian Blackberries- fruit, tea. Vine.


Maypops/Passion Fruit- fruit. Vine.


Gopher Apple- fruit. Shrub.


Eastern Prickly pear- fruit, pads. Cactus.


Persimmons- fruit. Tree.



Citrus- fruit. Tree.

Cabbage Palm- heart. Palm. “swamp cabbage”

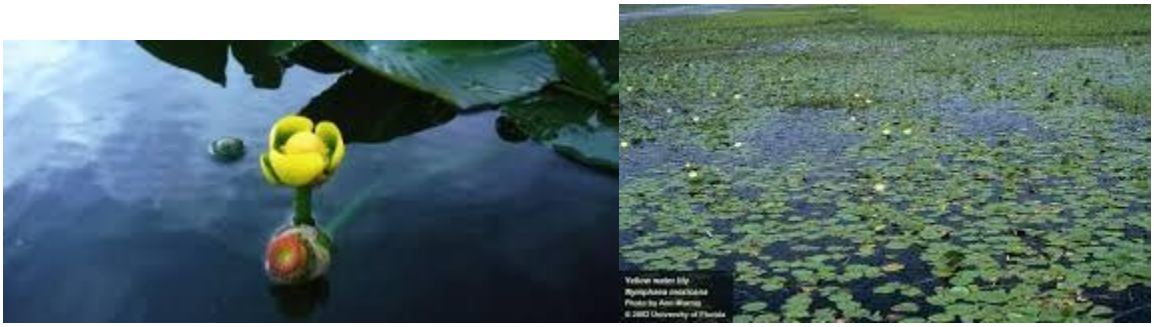


(smooth stem)

Pickerel weed- root. Water plant


Fragrant Water Lily or American Water Lily- cooked young leaves, cooked flowerheads, cooked seeds. Water plant.

Yellow Pond Lily- cooked roots (starch), cooked young leaves, cooked seeds. Water plant.



Cattails- green, root. Water plant.

Dollar weed- green. Annual.

Acorns/Oak trees- nut flour. Tree.

Pine tree- nuts. Tree.

stone pine tree

Gallberry- tea. Shrub.

Yaopon- tea. Shrub.


Purselane- green. Annual.


Coconut- nut. Palm.

Coontie/Florida Arrowroot- root. starch post fermentation. Palm Shrub.


Everglades Tomato- fruit. Annual.



Fox Grapes or Wild Muscadine Grapes- fruit. Vine.


Spiderwort/Hurricane Flower- flowers, stems, leaves, sap insect bite relief. Perennial.



Saw Palmetto- heart. Palm like Shrub.

 (saw-tooth spines along stem)

Betony or Florida Hedge Nettles or Wild Radish. Roots. Annual.


Edible Wild Plants of Florida

For course certification, the form must be filled out.

Member Name (Print) _____ Instructor Name (Print) _____

Member Position Number _____ Instructor Position Number _____

Member FEMA SID _____ Instructor FEMA SID_____

Date of Instruction _____

_____ Define the Cardinal Edibility Rule and edibility rules for this course.

_____ Be able to identify:

- _____ Parts of a Plant
- _____ Plant Growth Habit Groupings
- _____ Plant Families with both poisonous and edible parts

_____ Define the various preparation methods for edible wild plants.

_____ Complete the Exercises.

_____ Be able to give a Bible study on plants and diet.

With a complete sheet of initials, the instructor's signature signifies certification of completion for the Edible Wild Plants of Florida course.

Instructor Signature _____