Useful Weeds at Cooper's Lake

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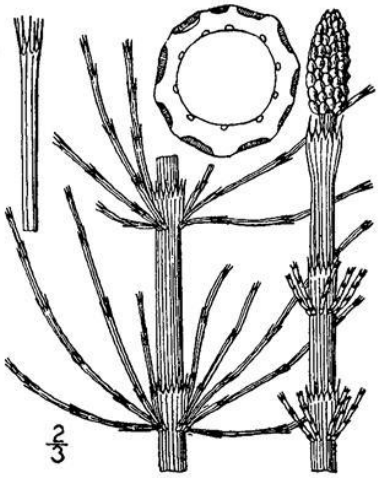
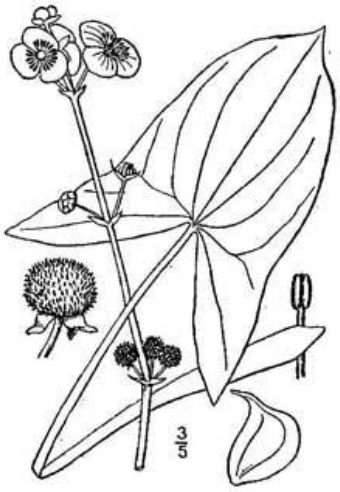
(Last revised – Summer 2020)


DANDELION


540. Tussilago Farfara L.
Coltsfoot; Y.




Joe-Pye Weed.



BEFORE WE BEGIN:

1. No medical advice should be construed from these descriptions. I am listing historical uses ONLY. Wild herbs can be *extremely* dangerous to use.

2. I am using English names for plants rather than Latin since both can change over time, and English is easier to remember. The names are from Peterson's Guides primarily, although I will tell you alternatives if I know them. That way, if you remember a name, you can look it up later.

3. For most concepts, I have given an example of a plant that illustrates it.

4. I alternate "he" and "she" rather than deal with the anomalies of English grammar. ☺

5. I am a storyteller. I could tell you the names of hundreds of plants, but by telling fewer names that are connected to stories, I think you will remember more of them for a longer time.

6. If you have older copies of my handouts, you should know that nearly every year I check, revise and update information. Like all other humans, I have made some remarkable mistakes upon the journey, but I keep trying.

Into History, Back

When I think about ancient people, I am awed by the fact that there was a time before farming when people lived off of whatever they could find growing around them, using plants for food, medicine, and tools. They didn't have nearly the variety we now have because of the number of plants that have been brought to the USA by travelers, so they were even more limited in their choices.

English plantain (White Man's Foot) *– poultice plant, tracking plant*

How Plants Were Gathered

Noticing the Boring

As a modern people, we often pass by the very things that ancient people would have most wanted to find. We pull them out of our gardens and pay a lot of money to have them eradicated. We have had the luxury of choosing beauty over utility. Recently, I have seen posts in an email group asking "Is it a useful plant, or is it just a weed?" Facepalm.

common plantain – *poultice plant, "edible" leaves, seeds laxative*
dandelion *– coffee, wine, spring greens, jelly, "potato," diuretic*
clover *– "women's complaint"*

Sevens

I don't know at what time in history it became tradition that for every seven plants, you can pick one; however, some sort of idea like this was utilized far into the past. Even ancient people realized that if you used up all the plants, or even a significant number of them, there would be no more in the future. Unless times were desperate indeed, some were left to propagate for the future. (Please note that seven is a "magical" number. In Biblical times, it meant more like "many.")

featherbells, ground tomato *– previously found at Cooper's Lake, now picked or mowed and gone*

Memorizing Plant Locations

Part of using plants for food and medicine means collecting them at the correct time. As a hunter-gatherer walked the land, she noticed what was growing in that area at all times of the year, learning to recognize plants at all stages of development. Some plants are much easier to identify at the ***wrong*** time for use. By remembering the locations, he could come back later and gather what was needed at its optimum effectiveness. Having now walked the Cooper's Lake, PA site for 39 years, and the Rochester, NY area for 41 years, I am amazed at how stable plant populations are - providing humans don't meddle.

curly dock – *early spring greens; poison ivy remedy*

Timing is Everything

Other plants are less visible during the "off season." Still, gatherers became adept at recognizing dried "fruits," leaves, flower structures and other plant characteristics to identify them at any time.

Sometimes, there are even alternate names for the dried plant:

bird's nest *– winter name for Queen Anne's Lace*

wild clematis, virgin's bower*(white color)****, traveler's companion****(for its remarkable length)****, old man's beard*** *(winter stamen only) – poisons water*

Some plants have different uses, depending on the season, or are only edible at certain times:

burdock *– second year root is tasty in soups and stews (look for flowers as it doesn't flower the first year) young shoots and leaves are edible, older ones contain dangerous amounts of oxalic acid.*

pokeweed *– young shoots and leaves are edible (sometimes called poke salad), but when stems become tinged with red they are emetic; blue berries are poisonous*

Careful Identification

Researching

Check your information - a LOT! Use several sources. Especially, beware of information found on the Internet. Consider:

- **Mis**information abounds. Check sources, date of revision of info, authors.
- Incomplete information: you may want or need edibility, drug interactions, side effects, allergy implications, etc. These are rarely found in one source
- Photo weed identifications sources have been rated at only about 30% accurate and often depend on other users' guesses as to the ID. At best, they give you a name to research further.
- Like every other science, knowledge changes over time. Understanding the safety of plants is not static. *(Virginia Creeper now thought to cause dermatitis from touch.)*

I would suggest reliable book sources to compare with Internet information. In the end, it will come down to your confidence in a particular source or author. I like Peterson's Guides best because they have done extensive on-going research, and they have line drawings that highlight the specific feature that differentiates one plant from another. However, even the new Peterson's medicinal is using photos which can be very misleading. Use the old one for ID and the new one for updated information. Other people prefer books with "keys," which are cascading outlines of characteristics. While they are more accurate, I get lost trying to follow complex, multilevel outlines.

Naming

Plants were named for many characteristics, such as: look, use, or eponym (named after the *person* who discovered a particular use.) These naming practices are still used in modern medicine.

heal-all (self-heal) - [use] **-** *flu and cold symptoms*

Joe Pye weed- [eponym] - *named after an "Indian Impersonator" who used it to cure a village of typhus.*

Coltsfoot - [shape of leaf] colds, asthma

Mistaken Identities

Where names or the look of the plant are deceptive, such as in these cases, it is extremely important to know the uses and dangers of the plant rather than making assumptions based on the name alone.

Queen Anne's Lace *– wild carrot* vs. ***poison hemlock*** *– most poisonous local plant* (lookalikes)

Gill-over-the-ground, Creeping Charlie, alehoof, ground ivy **-** these are regionalisms for the same plant (*for tea or to brew beer if you have no hops!!!!*)

boneset - *NOT for bones; for dengue fever ("bone break fever")*

dodder (vegetable spaghetti)- *NOT edi*ble - *used for an eye wash in China*

Dangerous Look-a-Likes

Needless to say, people who gathered herbs spent a lifetime doing it - **every day.** Tiny differences can mean the difference between life and death. In all, I have been actively identifying wild plants now for 59 years at least. But ANYONE can make mistakes, and in wild foods and medicines, mistakes can be fatal. Be sure to notice identifying characteristics noted in the books.

Most of all, when you are teaching others, don't be afraid to say you don't know or stop to check a book. *Listen* when someone has a different idea about a plant - and then check it out. It's better to look stupid than to endanger someone's life - you never know how someone might try to use what you have taught them.

If you decide to ***use*** wild plants or just want to get better at recognizing them, at first it is normal to see the similarities more clearly. You might start with lists differences between plants that look alike to you, preferably while looking at the actual plant. Include:

- Sizes and shapes of flowers and leaves
- Times of flowering
- Locations (ecosystem)
- Color of flowers
- Size of entire plant
- Stem types

Note: (see end of handout for chart)
comfrey*: previously used for lung ailments, poultices, tea; now identified as possible liver toxin &* ***foxglove (digitalis)-*** *strong heart medicine*
day lily *– edible flowers, shoots, root tubers &* ***tiger lily*** *– poisonous*
horse nettle*–poisonous* ***& jimson weed -*** *hallucinogen*

Importance of Wetlands

In the far past, people often chose to live near water. The reasons were seemingly obvious: transportation, drinking water, wash water for clothes and people, fish and other sea creatures to eat. However, maybe one of the less obvious ones was the number of food and medicinal plants that live near water. It's no secret that wet areas are among the most diverse botanically.

Wetland gathering has always presented a challenge for wild plant harvesters: what is ***in*** the water? Get good environmental information before using plants from wet areas even on your own land. Pollution is not a new concept, but modern chemicals can be lethal! Run-off from fertilizer, chemical lawn treatments, and insecticides are problems in every ecosystem in the US. They are remarkably difficult and expensive to remove from the water where that is even possible.
arrowroot *– starchy plant*
cattail *– edible shoots, root tubers, important nesting plant for wild birds*

Furthermore, as new varieties of plants are being brought for decorative (or medicinal) purposes, the escapees can further damage the ecological balance in wetlands.
purple loostrife – *decorative plant, used as a demulcent; deadly to livestock*
pampas grass *– decorative plant, full of silica, overshadows cattails*

While we no longer depend on wetlands for the bulk of our food and medicinal plants, they are a precious botanical and zoological resource. Seemingly sensible decisions prioritizing needs of people over wild lands may one day be regretted.

How Herbal Remedies Were Used

Herbal medicine also requires certain concepts which are quite different from our "fast, fast, fast relief" kind of culture. As more and more people begin to rediscover herbal approaches, it will be important to recognize and accept the responsibilities that go along with choosing herbs to self-medicate - or to find a reliable practitioner.

Oddly, many people believe that we should not use medications, that people of the past were somehow stronger and healthier. From the very beginnings of time, herbalists tried to help people to be more comfortable with the ills that plague us all from the cradle to the grave. (Pun intended.)

Descriptions of what the wild herbs were used for indicate that ancient peoples suffered from many of the same problems we deal with now – whether or not they knew exactly what those problems were. Think of herbal medicines as treating the symptoms rather than treating the disease itself, in some cases. For example, there were large numbers of herbal diuretics. While the ancients may or may not have recognized congestive heart failure, they could visually observe that fluid build-up was dangerous and needed to be removed from the body. And you would not *believe* the number of hemorrhoid cures...
piss-a-bed (dandelion) *- diuretic*
celandine *- hemorrhoid cure (also used for exterior malignant tumors -TOXIC)*

The Doctrine of Signatures

Ancient people often believed that the natural world contained a cure for everything if you could just figure out what it might be. One of their basic ideas was that if a plant looked like a particular part of the body, it might be able to help that area. The oddity is how often it worked.
coltsfoot (the mother and the stepmother) *- for colds and asthma -looks like a throat*
boneset *- looks as if it "heals" around the stem - for dengue ("bone-break") fever, NOT for bones*

"The problem and the cure grow together"

It was believed that "the problem and the cure grow together. In the case of poison ivy or nettles, this is often true.
poison ivy *– problem* ***jewel weed (touch-me-not)*** *- cure*

Determining Dosages or "How much of that willow bark should I use?"

Herbal medicine has come into wide popularity recently with the claims, such as, herbs are more "gentle" or "balanced." Modern medicines are usually highly refined substances. The dosage, effects of the drug, and side effects are consistent and predictable. However, herbal medicines contain more complex mixes of substances which may be better utilized by our bodies.

Dosages of herbal remedies can be extremely unpredictable due to processing, growing conditions, and other factors. For example, the dosage of ***digitalis*** (foxglove) that is effective in helping a weak heart is so close to the poisonous level that even refined versions can be fatal. A child died in Rochester from an overdose of ***mint*** tea. People think mint is a very safe treatment for stomach ailments, but proportionally larger doses may cause internal bleeding. Pure mint oil is poisonous. The size and health of the patient make a difference as to the "safe" amount to use.

In ancient times, medicine was often given little by little until the desired effect was achieved, hopefully without killing the patient.

Effects and Side Effects

Herbal remedies have side effects! This is not surprising since they are drugs which can be equally as strong as modern medicine – or even stronger. For example, look up the side effects of digitalis; foxglove will have at least those side effects. Aspirin from **willow bark** may cause more internal bleeding and the risk of ulcers than modern aspirin which allows one to limit these side effects by controlling dosage. (This last point is now being questioned in research.)

"Drug Free" Therapies

Lately, I have noticed advertising for "drug free" remedies, a term being applied to herbal supplements. This is kind of like saying "chemical free." If a plant has an effect on the body, one might rightfully call it a "drug," but by using terminology in this way, it is possible to sidestep FDA scrutiny. Buyer (and user) beware.

Preparations

After finding the plant, it was rarely a matter of standing in a field munching on a leaf. Each plant had its proper preparation. Often this involved soaking or heating the proper part of the plant in the proper liquid. For example:

- Infusion – soaking the plant material in hot or cold water for a particular amount of time *(tea)*
- Decoction – simmering the plant material in water *(root or bark preparations)*
- Tincture – combining plant extract with dilute alcohol
- Poultice – crushing plant often with warm water to apply directly to the body
- Homeopathy – giving a small amount of an allergen to boost person's own defenses
- Salves – mixing with fat or wax
- Smoking (inhalation) - While smoking tobacco harms the lungs, how were you going to get the medicinal properties of a plant directly into lungs? Compare it to a modern-day inhalant

  mullein (sometimes combined with coltsfoot)*-asthma, lung ailments*

Dangers of Herbal Remedies

The Allergy Impact

Those, like myself, who have many allergies, must also understand that we may react in unexpected ways. ***Chamomile***, a common ingredient in teas, calmatives, and sleep preparations, may be a trigger for those who are ragweed sensitive, as can ***Echinacea***. Other ragweed sensitive people may not react.

Sometimes the cause of allergies is misconstrued to be a showy plant that blooms at the same time as the real culprit. In Victorian times "Rose Fever" was actually an allergy to **grass** which blooms at the same time as the roses. People routinely blame cottonwood fluff for allergies that are actually caused by pollen from grass or English plantain that bloom at the same time as the cottonwood seeds fly. Showy **goldenrod** grows companion to boring **ragweed** and so gets blamed for allergies it rarely causes.

If you are prone to allergies, use new herbal preparations with caution! For example, although goldenrod rarely causes allergies in the field, using it as a tea *can* cause an allergy as you have now put the pollen *inside* of your body.

Pretty Poisons

There are quite a number of plants that have attractive berries. It is probably a good idea to teach children that they should not eat smooth berries (in Rochester) because the bulk of them are poisonous.

Furthermore, some herbal remedies are poisonous in larger quantities than used for medicine, particularly those that were used as sleep aids, such as, ***nightshade.***

Plants that resemble "healthy snacks" are particularly treacherous for children because they will not see small differences. Some examples are:

- ***Horse nettle berries*** *resemble yellow heirloom tomatoes*
- ***Everlasting pea*** *resembles snap peas*
- ***Unripe nightshade berries*** *resemble raw sweet peas*
- ***Pokeweed berries*** *resemble blueberries or grapes*

When people overdosed in the past, emetics, like ***pokeweed*** leaves, were the recourse. These are drugs that make a person vomit the offending material.

Potential Carcinogens:

As herbal medicine has become more popular in modern society, herbs are being used in some cases to treat cancers and the effects of chemotherapy and radiation. At the same time, warnings have started to crop up**,** advising that various herbal preparations may ***cause*** cancer or liver toxicity. I suspect that in the far past when herbal medicine was the only choice, there were several reasons why they did not notice this outcome.

- First, childhood cancers were usually not recognized as such: children died often and for reasons that no one understood.
- Other cancers were grouped as "consumption," a category of various "wasting" diseases including tuberculosis. These diseases were ***not*** considered terribly life-threatening. Yes, you might die from them eventually, but if you got to the point of having an age-onset cancer, you might consider yourself lucky to have lived that long.
- The fact that a person was taking a particular medication *might* never have been observed as leading to the eventual cancer. It may take years and observation of numerous patients to make conclusions about long-term effects of a drug. Data was not gathered in that way in the far past. Any one "doctor" could only have observed for the span of her lifetime. While knowledge was routinely passed down from one practitioner to another, and later, shared through guilds, there were certainly nothing like the huge scientifically controlled studies done in modern times nor the widespread communication of results in medical journals or on the Internet.

Note: In cases where surface tumors were noticeable, poultices were used.
wild cucumber - TOXIC, tumor poultice

Safe for Tonight

If I had a nickel for every person who said, "But they've used this herb for hundreds/thousands of years, so it must be safe!" The mindset in the past was remarkably different from our current health management. The most important thing was to cure the stuff that was going to kill you immediately, like fevers. If you didn't live past tonight, there would be no "rest of your life" to matter. Now, we expect to get a longer life with a relatively high quality of living, less damaged by the medicine we used to handle a crisis.

Modern American society is extremely litigious: warnings may be overdone to protect against lawsuits. However, if herbal medications are listed as "supplements," claims for their efficacy and safety are not normally checked by the federal government.

The impact for modern people is to be careful to get complete and up-to-date information when making decisions about how to treat diseases, whether with herbs or over-the-counter meds. If herbal medicine is part of the picture, the responsibility for the result becomes almost entirely that of the person choosing the medicine.

Medieval Connections between Food and Medicine

Medieval people saw no difference between food and medicine. All food was medicine in their minds. Early cookbooks listed properties of each food which echoed the elements of earth, air, fire, and water; relative amounts of warmth, coolness, dryness, or wetness; or the four humors. (Scully, Chapter 3, pp. 40-50) The idea was to maintain an appropriate balance within the body. It was the job of the cook to notice changes in complexion and body structure and adapt the food choices to improve quality of life of his employers.

Modern texts often give food uses for a plant that sound perfectly safe, while the medicinal uses for the same plant sound a bit scary, making the reader wonder how safe it is to actually eat the thing.

Medieval people would have had no problem at all with this concept since they were accustomed to thinking of *all* food as potentially dangerous.

We are now coming back to the concept of the importance of food **as** medicine. Every "new" diet has been tried in the far past, but as the pendulum swings back and forth from carbs to meat and back again, the ancient wisdom of "all things in moderation" is revealed again and again. Perhaps we just don't want to see it!

violet **-** *scurvy cure; "spring tonic" & salad*
rose hips *– source of vitamin C in winter & a tasty tea*

Too Much Work

At our current time in history, it is somewhat difficult to understand why people ate (or used as medicine) some of the wild plants that they did in ancient times. There are a number of plants that are normally considered to be poisonous which people in the past have eaten. For example, the "milk" in **milkweeds** is poisonous, but the flowers, small fruits, or early shoots (wild asparagus) can be eaten if boiled in three waters (Keep the first water for potential medicinal or utilitarian uses, throw the next pot of water out after boiling, get new water and boil again). This destroys the natural latex (milk) but also most of the nutrients found in the plant. Since it is relatively easy for us to go to the store and buy asparagus or broccoli, which are higher in nutrients and more interesting in taste, we would probably choose not to go through the bother. However, in a subsistence society, these plants provided important bulk in their diet, and even trace nutrients were better than nothing.

acorns *– used for flour by Native Americans, utilizing a process involving alternate boiling and roasting, or leaching acid in a flowing stream before roasting (too much tannic acid is usually in raw form of acorns so they considered poisonous by NYS authorities.)*

Tool Plants

While we think of wood as a material to make tools or broom corn for brooms and brushes, there are other plants that were used for tools directly.

horsetail– *in the form called "scouring rushes," they were bound together in bunches to scour pots or provided a final "sanding" of wood or metal. These plants contain a large amount of silica (component of glass.)*
fuller's teasels *– used to lift the knap of wool to make it softer*

Personal Thoughts

The document you are reading is a "life work." It has bee re-written for over 25 years as I learn more and correct mistakes. It began as a hobby, and now I teach medical students, garden clubs, and people who just share my interests. This is (hopefully) not be the last version. I cannot **use** most of these plants due to severe allergies caused by living near a bakelite factory that sensitized me to so many chemicals. But I love the idea of Sankofa "to go back for what is lost." I learn it to save the history.

I got interested in identifying wild plants on a hike through Allegheny State Park when I was approximately ten years old. I don't remember the man's name who led the 15 mile hike, but he seemed to know every plant and its use. I was hooked. My mother, Elinor Deeb, taught me more, as did countless botanists and novice weedwalkers (who asked the right questions) throughout the years. Then there were all the years of teaching and learning from my daughter, Melinda, who allowed me to repeat information until it stuck in my head. To you all, much thanks - I learn better from experience than from books.

If you find errors in my printed work or in the discussion from the workshop, please let me know. Or if you have something interesting to share, I'd love to hear from you. Contact information:

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BIBLIOGRAPHY FOR WILD PLANT IDENTIFICATION & USE

Note: This is not a "works cited" list, but rather a listing of my personal collection of books on wild plants. In case anyone's interested in reading more.

Beck, Barbara L. The First Book of Weeds. New York: Franklin Watts Inc. 1963.
Weirdly enough, this book was useful to begin the process of identifying a couple of plants not usually found in books about flowering weeds. Use ONLY along with more modern information.

Bremness, Lesley. The Complete Book of Herbs. New York: Penguin Books, 1988.

Cavanna, Betty. The First Book of Wild Flowers. New York: Franklin Watts Inc. 1961.
As in the Beck book above, it fills in some gaps in other materials and provides some alternative names. Use ONLY along with more modern information.

Dana, Mrs. William Starr. How to Know the Wild Flowers. New York: Dover Publications, 1963.
Note: reprint of an 1893 manuscript

Department of the Army, The Illustrated Guide to Edible Wild Plants. Guilford, Connecticut: The Lyons Press 2003.

Foster, Steven, 101 Medicinal Herbs. Loveland, Colorado: Interweave Press, 1998.

Foster, Steven and James A. Duke. A Field Guide to Medicinal Plants Eastern and Central North America. Boston: Houghton Mifflin Company, 1990.

Foster, Steven and James A. Duke. A Field Guide to Medicinal Plants and Herbs of Eastern and Central North America (Second edition). Boston: Houghton Mifflin Company, 2000.
Note: Because of the new photographic format which makes plant identification more difficult, it is a good idea to retain both of the resources on medicinal plants.

Kowalchik, Claire, and William H. Hylton, ed. Rodale's Illustrated Encyclopedia of Herbs. Emmaus, Pennsylvania: Rodale Press, 1987.

Martin, Alexander C. Weeds (A Golden Guide). New York: Golden Press, 1972.
This book covers plants not normally thought of as "flowers."

Miller, Dorcas S. Winter Weed Finder. Rochester, NY: Nature Study Guild, 1989.
Really nice beginning to off season identification of plants.

Peterson, Lee Allen. A Field Guide to Edible Wild Plants of Eastern/Central North America . Boston: Houghton Mifflin Company, 1977.

Peterson, Roger Tory and Margaret McKenny. A Field Guide to Wildflowers of Northeastern and North-central North America. Boston: Houghton Mifflin Company, 1968.
For me, this is the best resource for identifying plants. The line drawings clearly point out the specific features which differentiate one type of plant from another. Photographic texts, while decorative, show only one individual plant which may or may not resemble other plants of the same type.

Rohde, Eleanour Sinclair. The Old English Herbals. New York: Dover Publications, Inc. 1971
Note: On the copyright page, it indicates that this is a complete and unaltered reprinting of a 1922 manuscript. If you choose to use any of the plants, be sure to coordinate with modern information and be especially careful with which plant is being discussed: names and plants change across time and location.

Scully, Terrence. The Art of Cookery in the Middle Ages. Great Britain: The Boydell Press, 1995.

Shuttleworth, Floyd S., and Herbert S. Zim. Non-Flowering Plants. New York: Golden Press, 1967.

Venning, Frank D. A Guide to Field Identification Wildflowers of North America. New York: Golden Press, 1984.

Webb, Marcus A., and Richard Craze. The Herb and Spice Companion. New York: Barnes and Nobles Books, 2004

Plant Comparison

Directions: This can be used to clearly notice differences in similar plants as well as to get a clear ID of each of them. Please feel free to make copies or redesign at will.

Aspect	Possible ID:	Possible ID:
Color of flowers		
Size and shape of Flowers		
Time of flowering		
Size and shape of leaves		
Leaf arrangement		
Stem description		
Size of whole plant		
Ecosystem		