

Urbalism

Combining Herbalism and Urban Foraging To Form Natural Connections to an Urban Environment

S3-X

Can make medicinal products using the principles of traditional herbalism, and can demonstrate an alternative relationship between humans and our natural environment through an experiment in urban foraging.

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Introduction

Herbalism is among the oldest forms of medicine across the globe. Every traditional culture has its own system of interdependence with plants and the natural landscapes of their native lands. (Moore 250) The relationship that people form with plants is part of the way that they experience connection to Earth, their bodies, and life in general. Herbalist practices are based on the notion that we each have the power to heal ourselves through intuitive processes. While there is certainly potential for modern science and herbalism to co-exist in various manners, the underlying principles of herbalism do reflect a paradigm of healing that is alternative to the mainstream allopathic perspective. (Weed 1)

Historically, natural medicine was standard medicine. Knowledge about how to use medicinal plants in home remedies was both highly valued and essential to survival. Today this knowledge is less commonly known in younger generations. (Young xi) Allopathic medicine has become the definitive influence on our society's way of thinking about, and practicing medicine. We are all familiar with the concepts of allopathic medicine, which approaches illness by treating the symptoms; knowledge as being held in the hands of experts; and healing as the way to fix a problem. However, we are no longer aware of the fact that these are relatively new ideas, and that older medical traditions offer alternative views. (Weed 62-73)

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In many global traditions, especially in Europe and the settler's United States, the history of herbalism is directly related to the history of women. ("A Potted History of Herbal Medicine") Historical violence against women who were thought to render power or have heretical intentions, (as can be seen by the burnings and witch-hunts of Europe and the United States) has directly contributed to the loss of thousands of years worth of traditional knowledge about natural medicine. (Morgenstern)

Similarly, the genocide of the Native Americans led to the tremendous loss of wise and in-depth natural medical traditions, as well as knowledge about North American plants. While some of this knowledge is lost forever, much of it has survived, and has

been passed down to modern American Indians, and other non-Indian people. (Child x-xi) Native American cultures were so vastly informed about natural resources that despite such great loss, their traditions contribute some of the world's most incredibly rich perspectives about plant-based life and medicine.

Despite a history of misunderstanding and oppression against those who practiced natural medicine, women, and indigenous peoples, traditional knowledge of herbs and wild plants is still available. (Densmore 281) Today, the American tradition of herbalism is a conglomerate force of naturalists, women, indigenous peoples, and alternative health-care professionals. Due to the history of immigration in this country, plants from around the globe have taken root in American soil, and like all things American, the subject of American herbology now requires input from global viewpoints and traditions. (Young xiv) (Morgenstern) In the United States, people are seeking connection to herbal medicine for various reasons including the desire to become closer to nature; interest in their own traditional customs, or the traditional customs of others; and dissatisfaction with allopathic practices. (Moore 250)

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Since the 1960's back-to-the-land movement, many people have looked for natural solutions to modern-day problems. Especially as the medical field has become more technocratic; and more extreme in its reliance on surgeries, antibiotics, and pharmaceuticals with strong side effects; alternative natural medicine has grown in popularity in the last 35 years. (Winston 402)

Increasing interest in natural solutions to medicine has recently converged with the tremendous boom of American interest in natural foods. The "Organics" movement has stemmed from cultural disillusionment with modern day agriculture, and food related resource management and distribution. (Walsh) Today many Americans are seeking alternative ways of accessing food. One such way is the urban foraging movement.

Urban foraging is the practice of learning to identify and harvest plants that grow wild in urban areas. These are commonly considered to be weeds, but actually hold many important medicinal and nutritional properties that are simply lost to the common knowledge of an urbanite. (Weed. "Weeds in Your Garden?---Bite Back")

Urban foragers learn how and what to forage by synthesizing the information collected by botanists, herbalists, wild-food chefs, and indigenous traditions. They must know how to accurately identify plants, how and when to harvest them, and then how to use them. (Young xv-xvi)

Beyond a cheap and interesting way to make dinner, urban foraging has many fascinating social effects (Barnett). It brings people closer to nature, which means increasing their sensitivity to the cycles of weather, plant growth, animal and insect populations, and their own appetites. It also helps garner an appreciation for undeveloped spaces. On a political note, urban foraging reflects an awareness of the tension between abundance and lack in our modern society. Rather than consume through commercial means, urban foraging provides the option of gathering what would otherwise go to waste. (Kaufman)

For this project I decided to combine urban foraging and herbalism. Herbalism is a natural medical tradition based on principles of healing that emphasize the relationship between plants and people. Urban foraging is a social practice that leads city-dwellers to investigate, explore, and connect with their natural environments. Together they offer the chance to reinstitute connections to our body's healing process, as well as our natural environment.

This paper is organized into several sections that provide context and meaning to the presentation of the complete project. The first section (Part I) is dedicated to the principles of herbalism. The second section (Part II) describes the social context, as well as the practical and ethical aspects, of urban foraging. The subsequent sections are organized according to the stages of the project, as stated below.

A Description of this Project's Method:

- First, based on research about the growing patterns and habits of plants that are commonly found in Chicago's urban area, I decided upon two plants that could be foraged at this time of year.
- Second, I researched how to accurately identify the plants. (Part III)
- Third, I familiarized myself with the plants' medicinal proprieties. (Part IV)

- Fourth, I studied home recipes for herbalist medicinal products, and created original recipes. (Part V)
- Fifth, I collected my ingredients, identified and harvested the plants from an urban area, and created medicinal applications. (Part VI)

A Word about my Sources:

Several different kinds of sources were used in this paper. While the majority of the information gathered about botanical and herbalist principles comes from printed and scholarly sources, I found that support for certain sections of this paper came more naturally from current electronic means. For example, recipes for herbal remedies and wild-food dishes are certainly available in printed sources, (and I am so grateful to Susan Weed and Kay Young, in particular, for their wonderful and helpful works upon which I relied heavily in the writing of this paper,) however, the Internet has become a cornucopian resource for people to share what was once considered “folk knowledge,” through blogs and websites (both independent and corporate). Blogs are also informative and appropriate to the subject matter because they are written in narrative styles, and thus tend to reflect the author’s experience and relationship with plants.

Also, as I gathered information about my two chosen plants, Dandelion and Plantain, I attempted to include in these brief profiles information that seemed especially relevant and important. For each plant’s profile I drew from a wide variety of sources and compiled information that I perceived to be the most ubiquitous, specific, and informative. I included various images that helped me identify and understand the physical characteristics of the plants. These images are titled, and their complete citations can be found listed by their titles, in order of appearance, in the Glossary of Images.

Part I: The Herbalist Tradition: Five Principles of an Ancient Way

*“Like artists in their work, [herbalists] were masterful observers of the natural world”
(Child vi).*

The study of people who use herbs for medicinal purposes is a tremendous subject with deep roots and multiple outshoots. For the purposes of this paper I will describe five basic principles of herbalism that identify it as a science, theosophy, art, language, and culture. By defining these five principles, I am attempting to summarize various perspectives about herbal healing, and distill them to their fundamental forms. These five principles are at the heart of the herbalist tradition, and represent the core ideology behind the practice of identifying, gathering, and using herbs for their medicinal properties.

Principle One:

Herbalism is about Creating Relationships

“Persons who explore and come to know the natural world around them develop a sense of how the earth works and a feeling of being connected to it” (Young p XII).

The most definitive idea in herbalism is that in order to make plant medicines a relationship with the plant must be formed. By opening themselves to true relationships with plants, herbalists develop their intuition. Herbalists achieve this in many ways, including talking, praying and singing with the plant, dreaming with the plant, visiting the plant’s growing site, nurturing their gardens, etc. Developing a rapport with a plant is an intuitive process, and one that requires a nurturing and loving attitude. (Weed 38-39) By becoming acquainted with plants, an herbalist begins to form a deeper relationship with Earth. In this intuitive way, herbalists learn how to observe the land, harvest responsibly, and communicate with the natural world.

This intuition also guides herbalists in their practice of understanding what ails and cures. Herbalists are interested in the complex relationships between the causes and manifestations of illness. They practice forming a relationship to their own bodies, and learn to pay attention to the cycles of balance and imbalance. (Weed 23)

Herbalists also believe that the attitude of the person(s) growing, harvesting, and using the herb affects the properties of the plant and remedy. The importance of being mindful, intentional, and respectful during all stages of the medicine making process is fundamental. (Weed 85)

Principle Two

Herbalism is about Treating the Organism, not the Symptom

“Unlike much conventional medical practice, which focuses on eradicating the ‘bug’ or abnormal condition, herbal medicine has a more balanced approach, seeking to treat the weakness that gave rise to ill health, and setting this in the context of the patient’s life as a whole” (Chevallier 28).

“Healing/health is not dependent on curing, or removing the problem, but in making the problem meaningful, specifically, by finding the gift and the nourishment that the problem brings,” (Weed 21).

In accordance with many holistic medical traditions, a principle of herbalism is that symptoms are regarded as the body’s way of sending the message that conscious care and attention is needed. (Weed 21) To an herbalist, the notion that this conscious care is necessary only to the extent to which the symptom is quelled reflects an erroneous approach to healing. In fact symptoms are often minor aspects of the body’s complete message, and when the source of an issue is discovered and dealt with, herbalists believe that the symptoms will naturally alleviate. (Chevallier 28)

Symptoms represent an imbalance in a complete system that includes body, mind, emotions, spirit, and the environment. As mentioned in the first quote above, the overall healing of a person’s symptoms includes an effort to heal what is deficient in one’s life and/or body system. This may not be treated at all by a purely symptom-based approach to understanding the body’s needs. (Chevallier 28)

This is in line with many alternative and naturopathic traditions which “[focus] primarily on creating health rather than eradicating disease,” according to naturopath Dr. Laurie Steelsmith. (Steelsmith 4) Herbalists treat the organism, not the symptom, and thus support overall wellness and health.

Principle Three

Herbalism is a Practice of Holism:

The third principle of herbalism is closely related to the first two. It is the idea that healing is fundamentally about restoring the organism to its greatest potential for wholeness. Herbalism is “holistic” and strives to see the whole picture of an illness, rather than isolate its parts. This means that herbalists actively address the fact that, while the body may express illnesses, these illnesses often represent imbalances in the psyche. “Wholeness is maintained through equilibrium, the natural balance between body and soul. Sickness is defined as a loss of that equilibrium,” says Kat Morgenstern of the *Sacred Earth* online newsletter. (Morgenstern)

Through the intuitive logic that herbalists develop, if the whole of a person is to be treated, the whole of a plant is likely useful. As herbalist and author Andrew Chevallier says, “When the whole plant is used rather than extracted constituents, the different parts interact, often, it is thought, producing a greater therapeutic effect than the equivalent dosage of isolated active constituents generally preferred in conventional medicine” (Chevallier 29). By this statement, Chevallier expresses a common herbalist sentiment, which is that holism reflects a mysterious accuracy. To the definitive herbalist, author, and teacher, Susan Weed, this mysterious accuracy is due to the fact that holism honors the creative design of the plant and person.

In her instructional book *Healing Wise*, Weed discusses this phenomenon as “holographic” and teaches that by honoring and engaging the whole plant, for the sake of the whole person, one also engages in the healing of the whole world. (Weed 18)

Principle Four

Plants Have Spirits

In traditional cultures around the world the magic of plants has not been limited to their effects on the physical body, but also has been explored on psychological, emotional, and spiritual levels. (Chevallier 16) Globally, people who work with certain plants have had the roles of shamans, witches, wise women and wise men, witch doctors, etc. Through great reverence and appreciation for the spirits of plants, and traditional

ceremonies, these spirits can become accessible for communication. Therefore, another principle of herbalism is that plants have spirits. (Weed 85)

Although certainly most people who consider themselves an herbalist are not engaged in ceremonial practices at a shamanic level, the deep intuition that herbalists develop through their close connections to nature is for many a source of deep spiritual connection. While it needs be mentioned that there are herbalists for whom working with plants is a completely secular matter, I consider this principle foundational due to the spiritual nature of both the historical traditions of herbalism, as well as the practices of many modern herbalists.

Principle Five

Food is Medicine

Although, modern concepts about food and medicine isolate medicinal properties from nutritional properties, this is not the case in an herbalist perspective on plants. One of the principles of herbalism is that natural food has medicinal value. (Chevallier 11) Herbs are used to cook with, both as ingredients and spices, as well as in beverages, such as teas. These same herbs can also be made into medicinal applications such as decoctions, poultices, salves, and tinctures. (Moore 255-56) While not all plants are edible, many of them are if prepared correctly. Sometimes the desired medicinal effect of an herb is best integrated in the form of food. (Morgenstern) Applications of herbs are endless, and depend on the medicine maker's relationship with the plant!

Conclusion:

These five principles provided me with a foundational understanding of how herbalists' experiences and beliefs are deeply connected to their relationships with plants and nature. These ideas guided me into a more sensitized and open approach to this project. Living in a city, where a natural lifestyle is difficult, I found it empowering and rejuvenating to reconsider how one's attitude can determine one's bond and closeness with Earth. I also became interested with the particular issues that arise when one wants to practice herbalism in an urban environment. I reviewed my desire to harvest my own local plants, and reviewed them as a way of forming a relationship with the plants

(Principle 1), and getting to know the whole plant by acquainting myself with its natural environment (Principle 3). The following section is an introduction to the subject of urban foraging, and the various considerations that herbalists living in urban environments must be knowledgeable about.

Part II: Urban Foraging

Introduction:

Urban foraging is the practice of collecting and using found objects or plants in an urban area. (“Urban Foraging”) For the purpose of this paper, I will speak about the subject as it is relevant to herb collection. Urban foraging reflects the spirit of natural foragers who seek connection and interrelation with their natural environments. In the city, this also includes knowing one’s social environment. (“Ethical Considerations”) Urban foragers must become educated about how to safely identify and harvest herbs, so that damage is not done to the plant, the person, or the natural environment. (“Ethical Considerations”) Also, communicating about property boundaries, appropriate use of public spaces, and health concerns is a major element of responsible foraging. (Martin-Buhler) Urban foraging expresses a shifting social consciousness around the way that humans interact with nature, their environments, and their needs for sustenance.

Like any new social phenomenon, this movement presents several previously unconsidered complexities. Responsible foraging in natural environments requires knowledge about how to harvest without killing the plant, or, if the roots are being harvested, how much to take at a time from the growing spot. (Moore 254) Since urban environments have a greater population imbalance between people and wild plants, awareness about over-harvesting is especially important.

Urban foragers also need be especially aware of the toxic chemicals that permeate the environment. Contaminated air, water, and soil are all threats to the health and safety of those intending to consume urban-grown plants. Another major consideration are pesticides, insecticides, poisons, etc. that may be sprayed or sprinkled on lawns, boulevards, parks, etc. (Shute) Identifying safe foraging environments is one of the most important steps to urban foraging. It should be noted, that this is most relevant for plants being used in their raw states. If boiling or tincturing is going to occur, and if the plants are not intended for ingestion, cautions still apply, but generally to a lesser degree.

(SurvivalIQ)

Developing awareness and sensitivity to the needs of the plants, growing environments, and local communities is all a part of the urban foraging movement.

Urban foragers desire a deeper connection with their own local environments, and seek this connection through experiences with the harvesting and preparing of urban plant life.

Why Urban Forage?

“Perhaps because wild plants live and reproduce without the intentional aid of humans, they reveal more about the natural order and innate characteristics of an area than do domestic plants” (Young XII).

This quotation reflects the sentiment that wild foods are pure and natural, and reflect in their own microcosmic ways the habits and patterns of the natural world. Their genetics have not been altered by humans, (at least not as directly as agricultural plants) which offers people who seek to understand the ways of nature through connection with plants a more pristine resource. (Young XII)

Also, knowing where plants like to grow, be it in the woody shade, or by waterways, or in sunny fields, can contribute to a greater understanding of the essential nature of the plant. According to the principles of herbalism discussed in the previous section, it is clear that this would be important to many herbalists.

Guidelines for Responsible Foraging

“Be a responsible forager, asking for permission when necessary. Be kind to the trees and plants you harvest, leaving enough behind for them to regenerate or reseed. Always leave some for the wild birds and animals that depend on them for survival. Never gather so much in one area that it looks stripped or bare . . . move along and take a little here and a little there as the animals do.”

-Laura Martin-Buhler (Martin-Buhler)

- Know your resource. Know if it is the appropriate time to harvest what you are looking for. Do not take what won't be used. (Shute)
- Know how to take this resource carefully, lovingly, and without harm. Do not damage the resource, or the area around it.

- Be aware of the role that this plant has in its larger natural community. Be educated about local conservation efforts. (Pollock)
- Be aware of how much you take, do not overharvest. (Moore 254)
- Be aware of possible dangers, including wildlife, poisonous plants, property laws, and environmental issues such as pollution and contamination. (Shute)
- Be thankful and loving in your heart.
- Seek connection with the resource, ask its permission, and express your gratitude. (Weed 38-39)

When dealing with wild herbs the following things should be known:

- The medicinal or edible parts of the plant,
- When these parts are available for harvest (Shute)
- How much to take from each plant, or growing spot (Moore 254)
- How to harvest the plant without hurting its natural life cycle (Brill)
- Cautions about poisonous parts of the plant, look-alikes or neighbors. (Young xv-xvi)
- The history of the lawn or natural area for an in-depth understanding of the chemical influence on the plant life. (Moore 252)

Another very important environmental consideration for responsible foraging is the effect of pesticides, insecticides, chemical waste, fumes and exhaust, radiation, run-off, paint-chips, and other urban emissions on the healthfulness of plants. (Shute) Some urban foragers have considered ways that municipalities can alert foragers to potentially toxic areas, through signs and advisories, etc. (Kaufman)

Weed Walks and Herbal Harvests

Herbalists in natural and urban environments engage in the practice known as “weed walking.” (Weed X) Weed walks are any walk that a person takes in which the intention is to allow themselves to experience connection to the energy of the plants around them. The person may begin to feel guided toward certain plants, either to admire them, notice them, or talk and sing to them. This is the basic approach that many

herbalists take to finding the plants that they work with. (X) Weed walks can be taken in the city just as they can be taken in wild environments. (260) Urban foragers who forage for herbs can walk through their parks and neighborhoods, and engage with the plant life.

Herbalists commonly talk about foraging as an act of listening and relationship building. If you pay attention, you can feel when a plant is giving of itself, or when the plant is saying “no, not now,” or “no that’s enough.” Responsible foraging, and true herbalism depend on this kind of willing participation from the forager to engage in a conscious and loving relationship with the plants. (Weed 38-39)

Herbalist, biologist, professor, and forager Susan A. Moore had the following pieces of advice for her students: “To prevent problems of over harvesting, one must never collect more than 10% of the herb surveyed,” (Moore 254). She also offered her students the following examples of how to apply the general guidelines listed above:

- Q: How much should I take from each plant?
A: Leave plenty of leaves on each plant. Take only 10% of the resource available at the growing site.
- Q: When are these parts available for harvest?
A: Harvest flowers before fruits and seeds begin to grow. Harvest flowers and stems, and anything that will be eaten raw before noon, before the sun begins to wilt them. “[Preferably] when the dew is still on the plants,” (Moore 254).

Considering Conservation

To make sure that I wasn’t causing any trouble with my own urban foraging experiment, I arranged an interview with a well-known local conservation activist, Judy Pollock, Director of Bird Conservation in the Chicago area branch of the Audobon Society. We took a plant walk, and between pointing out Goldenrods, Asters, Buckthorns and Hackberry trees, we discussed issues of urban foraging on conservation efforts.

Pollock was clear that plants affect the entire ecosystem and natural living community, including birds and insects, and that disturbances in growing sites can have unfortunate unintended consequences. This is especially true for rare wild plants that are

being reintroduced to an urban area, for conservation purposes. “Sometimes people just don’t know what they are really messing with. They take plants that they have no business taking. You just have to be well-informed.” Pollock also stated, however, that for most common weeds, over-harvesting is not a realistic threat. (Pollock)

In *Wild Seasons*, Kay Young also mentions that it is important to be aware of how many seeds or berries a plant yields. If there are few, she suggests leaving them for birds and animals. (Young xvi)

The Social Context of Urban Foraging

Urban foraging is a larger subject than herb foraging. In fact it is a sub-cultural movement sweeping major metropolitan areas around the globe. The socio-political aspects of this movement include people’s responses to agricultural issues, America’s consumer-based industrial cultural values, the need for waste reduction, as well as an interest and desire to become personally closer to nature. (“Wild Foraging”) Diverse, current, and charged, urban foraging is a fascinating subject to be explored. As a social movement, urban foraging in the United States has roots in traditional herbalism, immigration, the back-to-the-land-movement, as well as the recent Organics and “Freegan” movements. In the following section I will provide a brief review of how each of these influences help to describe the urban forager within a social context.

- Herbalists have influenced the urban foraging movement through the practices of weed-walks, and usage of vernacular plants.
- America’s history of immigration has influenced urban foraging because for generations immigrants have made use of familiar wild-grown urban plants that allowed them to continue to make foods and medicines with ingredients that would not have been found in American grocery stores. Indeed, these immigrants were perhaps the first American urban foragers. (Foderaro)
- The renewed interest in traditional plant-based foods and medicines has its roots in the back-to-the-land movements of the 1960s and 70s. This counter-cultural movement is still being expressed by urban foragers who are

interested in forming a closer relationship with nature, and learning about traditional ways of life. (Winston 402)

- The back-to-the-land movement has also evolved into what is now a very powerful social demand for the re-shaping of American agricultural practices, and a return to “organic” foods. For some, urban foraging is a way to avoid and protest a corrupted system of food production and distribution, and practice a more self-sufficient path to personal sustenance. (Walsh)
- Finally the “Freegan” movement is a very politically charged social trend that is sweeping America’s cities. It is based on the idea that urbanites can resist becoming over-consumers by foraging and scavenging for food and material needs. Freegans consider urban foraging one of the ways that they support their alternative lifestyle. (“Wild Foraging”)

Defining Appropriate Social Conduct

Urban foragers encourage each other to apply a code of ethics. (“Ethical Considerations”) This includes both environmental and social considerations.

Generally speaking, in small quantities urban foraging is quite harmless to the natural environment, and also generally acceptable in our social environment. (Kaufman) Urban berry patches and Mulberry trees are generally fair game for children, and anyone wanting to help themselves to a snack. However, when groups of people come with mason jars and baskets it becomes another story. These are issues that will have to be considered as urban foraging becomes more popular. (Kaufman)

Issues of trespassing and private property laws are relatively clearly defined in most cases and, within the urban foraging community, foragers are encouraged to ask permission whenever they are foraging from private grounds. (“Ethical Considerations”) In fact, talking to community members is one of the ways that this movement emphasizes connection to the local environment. “We believe that building this kind of wild food network helps connect us to one another as well as our urban habitat. It makes our communities that much healthier!” (“Ethical Considerations”)

Conclusion

Responsible and respectful ways of harvesting plants have been applied by botanists and herbalists since the beginning of time. These methods involve an attitude of stewardship, and relationship with the plant and the site from which it is harvested. It is important that urban foraging be approached with this knowledge and insight, rather than from an opportunistic standpoint.

To prepare for my own urban foraging experiment I first needed to learn how to properly identify the herbs that I intended to harvest: dandelion and plantain. It immediately became clear that an overall foundational understanding of how to identify plants was necessary for this process. The identification of plants is a complex venture, as knowledge about the plant's structure, characteristics, and habitat is necessary. In the next section I will provide a basic review of the main questions and considerations that led to proper plant identification. These questions served as a guide when I considered where I would find an abundant growing site, and how to verify that I had correctly identified my herbs, before attempting to harvest them.

Part III: How to Identify Wild Herbs and Plants

My research about urban foraging guided me to study how botanists and herbalists approach plant identification. While professionals identify plants within the context of a complex system of classification, they also ask certain basic questions that any lay-herbalist can understand. Botanists and herbalists take into consideration information about the plant, the environment, and the time of year. (Shute) Physical characteristics of the plant must be known for accurate identification. Knowing important clues about the plant's preferred environment is also essential. Here are several helpful questions that can guide one to look for their desired plant in the right places:

- What kind of environment does it prefer? (Is it more commonly found along waterways, or in dry climates, along forest floors, or in sunny fields?)
- What is the average day temperature and rainfall?
- What other plants tend to grow nearby?
- What kind of animal eats this kind of plant, and would they be found in this place?
- What kind of insect might this plant attract?

- ("Plant Identification" 61)

Here are several helpful questions and factors about the physical characteristics of the plant that must be taken into consideration:

- What expression of its full life cycle can you expect the plant to be in at the time that you are searching? (Will it be flowering, producing berries, seeding, or bear green leaves? Will it be tall, or still very young?) (Young xv)
- Type of leaf (Ex: Toothed, Lobed, Lance Shaped, Lobed at Bottom, Entire, Divided, Oblong, etc.) (Newcomb xvii-xxi)
- Type of leaf arrangement (Ex: "Alternate, Basal, Opposite, Whorled") (Newcomb xv)

- Type of Flower (Ex: Radially symmetrical, bell-shaped, spiked etc.) (Moore 250) (Newcomb xiv and 398)
- Coloration (Moore 250)
- Root structure
- Stem shape (Moore 250)
- Qualities such as thorns, hairs, etc.
- Size of plant (including leaf size, flower size, etc.) (Newcomb 5)

While some of these distinguishing factors are rather self-explanatory, I found it useful to peruse the different drawings and identification keys that are often included in field guides, books, and websites, in order to get a sense for what was not so self-explanatory. One helpful example is included below. Specifically, since both dandelions and plantains have a “basal rosette” leaf arrangement, I wanted to know exactly what that was.

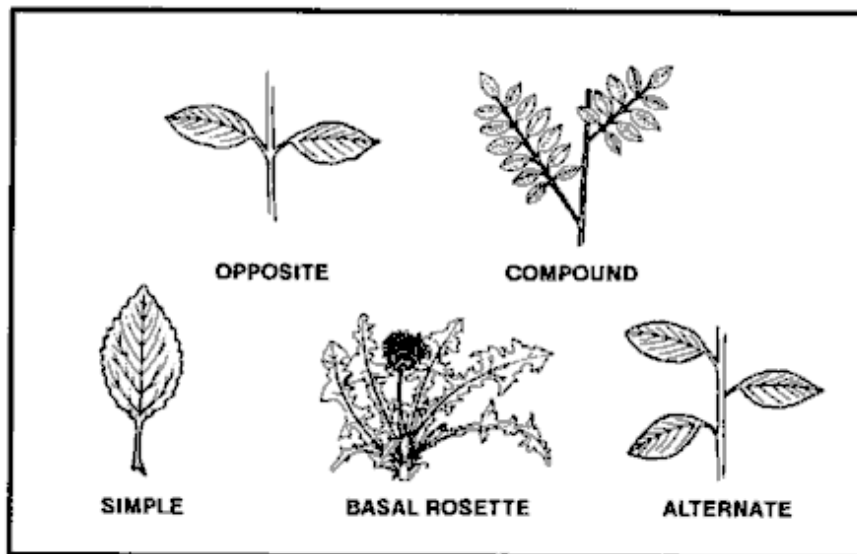


Figure 9-3. Leaf arrangements.

Types of Leaf Arrangements

Conclusion

These references and guidelines helped me confidently determine the characteristics of dandelions and plantains. Beyond learning how to identify herbs, understanding the medicinal value of dandelions and plantains was necessary in order to

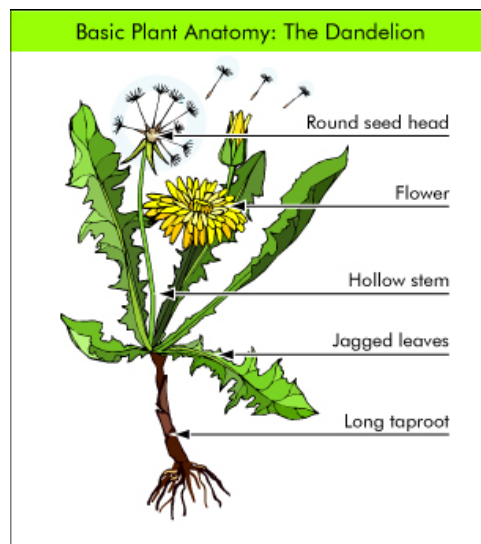
make herbal products. The following sections of this paper are profiles of the herbs dandelion and plantain. In each profile I compiled information about how to accurately identify the plant, a summary of its medicinal qualities, and a review of ways to prepare it for the purpose of eliciting medicinal effects.

Creating these profiles was a part how I practiced the principles of herbalism, and responsible urban foraging. I wanted to make sure that I formed a relationship with the plants. Learning about the plants' capacities and characteristics deepened my appreciation, and contributed to my ability to bond with them. It was also very important to me that I apply responsible harvesting techniques. The profiles allowed me to confirm that I was appropriately addressing the questions of when, where, and which plants to harvest.

Part IV: A: Profile of a Dandelion

"The Dandelion's pallid tube Astonishes the Grass, And Winter instantly becomes An infinite Alas— The tube uplifts a signal Bud And then a shouting Flower,— The Proclamation of the Suns That sepulture is o'er."

-Emily Dickinson (Moonwatcher)



Complete Anatomy of a Dandelion

Common Name: Dandelion

Other Names: Lion's tooth, Fairy Clock (Sierralupe, S. and Hunter C.)

Scientific Name: *Taraxacum Officinale* or "Remedy for Disorders" (Moonwatcher)

Family: Asteraceae, or Composite, or Sunflower (Moonwatcher)

Environmental Clues:

- **Can be Found in:** woods, fields, urban spaces, lawns, between concrete etc.
- **Growing Season:**
 - Seed in the spring
 - Flower in the summer, fall, and sometimes winter

- Leaves all year (Brill)
- **Look-alikes include:**
 - Wild Lettuce: Doesn't have dandelion's jagged toothed leaves, the flowers tend to be smaller, and the plant tends to be taller. ("How to Identify a Dandelion")
 - Sow Thistle: Very similar in properties as well as appearance. One recognizable difference is that the flowers don't grow 1:1 ratio of stem to flower. ("How to Identify a Dandelion")
 - Cat's Ear or False Dandelion: Hairy leaves, the contour of the leaves is wavy vs. jagged. The seed ball is tinted yellow and not as large as a true dandelion's ("How to Identify a Dandelion")
 - To really know the Dandelion Look for one stem per flower. The stems are un-branched, and hollow. (Weed 136)

Physical Characteristics:

Leaves:

- Sharply toothed, or jagged
- Lance-shaped
- Grow in basal rosette (Young 17)
- 3-12 inches long
- Sometimes reddish veins (Moonwatcher)
- Bright Green to Deep Green (Sierralupe and Hunter)
- No hair on the bottom (Weed 141)



Jagged Leaves

Stems:

- Can have a purple tone ("Medicinal Plants in Your Backyard: Exploring Biodiversity Through Ethnobotany")
- Milky sap inside (Young 17)
- Hollow (Young 17)



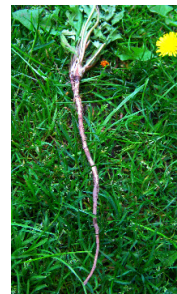
Bright Yellow Florets

Flower:

- Bright yellow
- 1-2 inches wide
- Flat and Broad (Moonwatcher)
- Composed of many florets (Young 17)
- “Curved bracts” form the underside of the flower (Moonwatcher)
- When seeds, becomes a spherical puff-ball

Root:

- Fleshy taproot (Sierralupe and Hunter)
- Branchy tangles around taproot
- Dark brown, brown, white (Sierralupe and Hunter)



Long Taproot



Tangled Taproots

Botanical Information:

- There are over 40 species
- Their taproots can grow up to 15 feet long

- They regenerate quickly because buds are reproduced at the crown of the root (Cudney)

Edible Applications:

- Roots roasted in vegetable dishes
- Roots roasted as coffee substitute or tea
- Roots Fried in oil or butter
- Flowers used fresh in a salad
- Flowers dried or fresh in a smoothie
- Flowers in pickles
- Flowers in wines and vinegars
- Stems in stir-fry
- Stems in soups
- Stems in salads
- Stems in smoothies
- Leaves in salad
- Leaves in stir-fry (Brills) (Sierralupe and Hunter) (Young 17-22)

Medicinal Applications:

- Roots roasted and made into teas
- Roots made into decoctions
- Roots made into tinctures
- Leaves made into poultices
- Leaves made into teas
- Flowers made into syrups
- Flowers made into teas
- Sap used as topical treatment
- Tinctures (Weed 152-160) (Sierralupe and Hunter)

Nutritional Properties:

- **Roots:** Calcium, Potassium, Taxacoside, Phenolic acids, Minerals, Vitamin A (Sierralupe and Hunter) (Sletten)
- **Flowers:** minerals, potassium, Vitamins A and B-Complex (Sletten)
- **Leaves:** Vitamin A, Vitamin C, Vitamin K, Calcium, Iron, Magnesium, Phosphorous, Potassium, Zinc, Biotin, (Brills) (Dandelion Greens, Raw) (Sletten) Protein (Gail)

Medicinal Properties:

- **Roots:** Liver, Kidneys, Digestive Health, High Blood Sugar, Toxins in any organ. Especially good for Gallbladder health, can help prevent gallstones (Chavallier 140)
- **Flowers:** antioxidant, and immune system boosting properties, as well as Vitamins A and B-Complex (Sletten)
- **Leaves:** Digestive, Tonic, Diuretic, Help prevent and alleviate Gallstones (Chavallier 140)
- **Sap:** The milky sap has latex, which has a caustic quality and can be used to cure warts (Sierralupe and Hunter)

General:

Dandelion is basically a detoxicant, and most effectively through its diuretic properties. All parts of the Dandelion plant are diuretic. This means that through ingestion the blood, urine, liver, digestive system and kidneys are all purified. The primary organs affected by dandelion are the liver and gallbladder (Chavallier, 140). Dandelion is a very strong medicine, but it is also a gentle plant. In fact, Sierralupe and Hunter describe dandelion's particular blend of qualities as unusually self-balancing. They say, "Unlike other diuretics, dandelion contains vast amounts of potassium that restores the mineral balance in the kidneys as toxins are flushed out," (Sierralue and Hunter). This is very important because, while some plants have diuretic effects, often they need to be taken in conjunction with other plants to prevent the body from becoming

overwhelmed by toxins being suddenly flushed through the system. Dandelion both flushes the body of toxins and replenishes its resources.

Digestive System:

The oils present in all parts of the plant are what stimulate digestion, thus aiding all of the digestive organs, including the bowels. (Sierralupe and Hunter)

Energetic Effects:

On a physical as well as energetic level, dandelion is all about getting energy out of blocked patterns. This is how it detoxifies. It helps purify, and in order to purify it brings stuff up. If one is open to having a relationship with this plant's spiritual essence it can be appreciated that dandelion helps bring unconscious patterns to the surface, so that they can be dealt with on a conscious level by the person seeking healing (Weed 141).

When to Harvest:

- **Roots:** are biggest and tastiest in the fall. Roots harvested in the early spring yield strong medicine. Do not pull up the roots while the plant has buds in order to preserve the growing site. (Weed 139)
- **Flowers:** Summer
- **Stems:** Any time of year, but most tender and least bitter in the spring.
- **Leaves:** Any time of year, but most tender and least bitter in the spring. (Brill)

Illnesses and Ailments Treated:

Arthritis; Diabetes; Cancers especially mouth and lung, Diabetes, Gout; High blood pressure; High cholesterol; Inflammation of the digestive system; Kidney stones; Lack of trace minerals, Liver diseases; Memory loss, Poisons including atmospheric and environmental poisons ("Dandelion Greens, Raw") (Gail) (Sierralupe and Hunter) (Weed 141)

Part IV: B: Profile of Plantain

“Radish, Raphanus sativus Romeo. Your Plantain leaf is excellent for that, Benvolio. For what, I pray thee, Romeo? For your broken skin”

Romeo and Juliet

-William Shakespeare (Shakespeare)



Complete Anatomy of Plantain

Common Name: Plantain

Other names: Cuckoo’s bread, Englishman’s foot, Snakebite, Ripple grass, (McKenzie)
Life medicine (*Livingafield.com*)

Scientific Name: Plantago (Angier 170)

Family: Plantaginacea or Plantain Family (Angier 170)

Environmental Clues:

- **Can be Found in:** Lawns, along waterways, roadsides, fields, meadows, open sunny places, roadsides parks, etc.
- **Growing Season:** April through October (Desy part 2), Flowers May-September (L.)
- **Look-alikes:**
 - Some species of Lilly that may be toxic (Ahlborn)
 - Broadleaf dock (Ahlhorn)
 - To be very certain that you are dealing with plantain check for the parallel veins on the underside of the leaves. You can also peel apart the stem and the parallel veins should remain intact. There may a purple tone at the base of the stem. (Livingafield.com)

Physical Characteristics:

Leaves:

- Parallel veins or stems especially on the leaf's underside (Wood)
- Oval shaped; broad
- Basal rosette
- Lie flat on the ground (*Livingafield.com*)

Stems:

- Grow straight from the center of the basal rosette.
- At its highest can reach 12-18 inches. (*Livingafield.com*)



Plantain Seed-head

Seed-head:

- Compact
- Turns from green to brown over the season. (Wood)

Botanic Information:

- 270 species of plantain
- 3 genre (Ahiborn)

Edible Applications:

- Young leaves in salads
- Leaves in cooked like greens
- Older leaves cooked into sauces (Angier 170)

Medicinal Applications of Leaves:

- Creams
- Decoctions
- Eyewash
- Extract
- Liniments
- Lotions
- Poultice
- Powder
- Salves
- Teas
- Tinctures (Moore 255-56) (Ashton)

Nutritional Properties:

- Vitamins A, C, and K (McKenzie)
- Fiber; Potassium; Calcium; Magnesium; Sodium; Phosphorus; Zinc; Copper (Ashton)

Medicinal Properties:

- **Skin:** Stops the bleeding, soothes and disinfects: cuts, scrapes, rashes, infections, insect bites, bee-stings, hemorrhoids, (Weed Web) (Ashton) Draws poison out of the body in some cases of snakebite and rashes caused by poisonous plants. (McKenzie)



Basal Rosette and Seed-heads

- **Intestines:** Rebuilds and stimulates mucosal lining. (McKenzie) Alleviates diarrhea, anti-inflammatory. (Ashton)
- **General:** Helps release excess water. Anti-biotic. Anti-inflammatory. Analgesic. Expectorant. Immune system. (Ashton)

Active Healing Properties of Plantain Leaves:

- Tannins Allantoin and Aucubin support kidney function.
- These tannins also “help to draw tissue together, healing superficial wounds and [stopping] bleeding.” (Desy part 3)
- Flavonoids thicken mucosal linings. (McKenzie)

When to Harvest:

- Leaves can be harvested at any point in the growing season. (Jeanroy)
- Seed-heads harvested during summer months (L.)

Illness and Ailments Treated:

Asthma, Bee stings, Bleeding, Bronchitis, Bruises, Burns, Coughs, Cuts, Diaper Rash, Diarrhea, Gum Infection, Hemorrhoids, Infections, Inflammation, Insect Bites, Intestinal problems, Itches, Kidney inefficiency, Lung conditions, Mouth ulcers, Mucous irritations, Poison Ivy and Oak, Rashes, Snakebites, Ulcers. (Ashton) (Jeanroy) (*Livingafield.com*) (McKenzie) (Weed Web)

Conclusion:

With this information about dandelion and plantain, I felt confident that I could identify, harvest, and appropriately access what type of remedies to make out of dandelion and plantain. The next step was to research and create recipes for these homemade remedies. The following two sections are the original recipes that I used, and a photo documentary of my process.

Part V: A***Recipe for Dandelion Root Tea******Harvest:***

- Find an open lot or field where dandelions are growing, and where they are unlikely to have been sprayed by pesticides (i.e. not on a golf course).
- Once identified, look for ones that grow tall (up to 18') for larger taproots.
- Using a small shovel, or dandelion digger, dig up the taproot and as much of the tangled root branches as possible.

Preparation:

- Wash thoroughly by soaking, rinsing, and scrubbing
- Chop into ½ inch size pieces
- Preheat oven at 250°
- Place evenly on baker's sheet,
- Roast for 2 hours, flipping them after 1 hour, cool when finished

Making the Tea (Application):

- Steep the roasted roots in boiled water to your taste!
- Options: add cinnamon, cloves, or nutmeg for a more complex flavor
- Optional: Grind the roasted roots until they are a powder, then drink as an uncaffeinated coffee substitute

Note:

This recipe was inspired by a combination of the following sources:
(Audrey) (The Tea Lady)

Information about how to harvest dandelion root was taken from the following sources:
(Brill) (Weed 136-140)

Part V: B

Recipe for Large Salve with Plantain Sprinkles

Harvest:

- Find an open lot or field where plantains are growing, and where they are unlikely to have been sprayed by pesticides (i.e. not on a golf course).
- Once identified, dig them up with a small spade from the roots beneath the basal rosette. It is only practical to dig up the plant if there are many at the growing site, and if you are planning to make a large quantity of salve. The roots should come up very easily
- If not, simply pick a few leaves from each plantain plant as you walk along.

Preparing the Plant:

- Soak for 5 minutes
- Double Rinse
- Pull each leaf from the stems and roots
- Rinse again
- Let soak briefly while discarding any seriously damaged leaves
- Chop selected leaves and then throw them in the food processor
- Strain the water from the plant, and gather several pinches worth of chopped plantain leaves

Preparing the Base:

- Chop the beeswax into small pieces, about half the size of your thumb
- Mix 3 tbs. olive oil with 3 tbs. coconut oil
- Heat this mixture over low heat using a double boiling system (I used an old coffee can to melt the wax in) for about 5 minutes
- Melt a small handful of beeswax pieces into the oils
- Add a few drops of tea tree oil
- Add a few drops of rosemary essential oil

Step 1: Find a container with the dimensions you desire

Step 2: Alternate pouring a thin layer of oil with sprinkling the chopped plantain into the container. Begin and end with oil.

Step 3: Freeze for 10 minutes, or until hard on top, but not frozen stiff.

Take out and enjoy!

Option: Chop into 4 sections and use as bath oils. Allow each section to dissolve in warm baths.

Alternative Recipe for Plantain Salves

Preparing the plant:

- Soak for 5 minutes
- Double Rinse
- Pull each leaf from the stems and roots
- Rinse again
- Let soak briefly while selecting the leaves with the least amount of dirt or damage
- Dry and Chop leaves, and then throw them in the food processor, adding 3 tbs. of olive oil
- Strain the oil of the plant into the heated oils (see recipe above)

Pour into an old ice-cube tray, making several small gift-sized salves.

Note:

These recipes were most closely inspired by a combination of the following sources.

(Jane) (Patritia)

**Part VI:
Photo Documentary**

Dandelion Tea



Growing Site for Dandelions



Wild dandelions



Digging Dandelions



Cut Root from Stalk



Tangled Roots



Soak and Scrub Roots to Clean off the Dirt



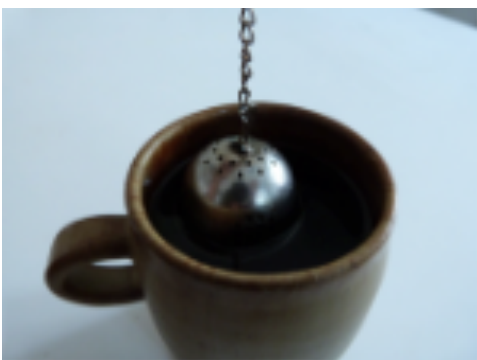
Chop into 1/4 inch Pieces



**Place Evenly on Baker's Sheet
Roast for 2 Hours**



Place a Few Root Pieces in a Tea Ball



Brew to Taste and Enjoy!

Plantain Salve



Growing Site for Plantains



Wild Plantains



Digging Wild Plantains



Separate the Leaves



**Chop the Leaves and
Throw them in the Food Processor**



**Ingredients for Plantain Salve
With Chopped Beeswax**



Mixed Olive and Coconut Oils



Heat the Oils Using a Double Boiler



Add Essential Oils



**Strain the Water from the Plant
And Gather Several Pinches
Of Chopped Plantain Leaves**



**Alternately Pour Layers of Oil
And Sprinkles of Plantain Bits
Into the Chosen Container**



**Place in Freezer for about 10 minutes.
Remove and Enjoy!**

Alternative Recipe for Plantain Salve



Strain the Oil From the Plant



**Pour the Plantain Oil
Into the Base Oil Mix**



**Pour into Ice Tray
Freeze for about 8 Minutes
Remove and Enjoy!**



Final Products Plantain Salve!



Part VI

Personal Reflection

This project derived from a seed of curiosity. I have always felt drawn to the intuitive process of herbalist medicine, and I have been grateful for this opportunity to invest more fully in a study of its principles, history, and applications. While for years I have been acquainting myself with the medicinal properties of natural foods, and customarily use simple herbal remedies such as teas, lotions, and salves, I have always been aware of a feeling of disconnection that sourced from the fact that I was not harvesting my own plants.

It has been my great fortune in life to have had the opportunity to travel both internationally and extensively. I have lived with indigenous and non-indigenous rural people in India, Nepal, Peru, Ecuador, Panama, Costa Rica, and the United States. These people have often exemplified for me the great joy of a lifestyle in which one could walk outside, recognize a useful plant, and engage its healing properties through appropriate preparation. It has often been with a degree of sorrow that I have compared these experiences to my urban home, and remembered that Chicago is not an easy place to form relationships with plants.

It was because of this that I decided to engage in this project with the added viewpoint of urban foraging. While it is simple to make medicinal applications with herbs purchased at the store, I wanted to connect to the plants I would use, and begin learning about plant identification for future projects. At first, I was overwhelmed by the possibilities that opened before me. I had no idea that my front yard, let alone the city of Chicago, had so much to offer! I began to walk down the streets with a new appreciation for undeveloped lots, alleyways, and curbs. Even though I focused on only two plants for this paper, the research has opened me to various other local plants including chicory, burdock, goldenrod, aster, hackberry, etc. I became conscious of a beautiful symphony of new friendships that were available just by walking down the street!

However, as I did more research about the problematic effects of pollution on urban foraged plants, I did experience a wave of disillusionment. I began to feel that it was impossible to really know if anything was safe to ingest! For this project I chose an

area of the city that I am familiar with, and I am fairly certain that it is not sprayed with pesticides or other chemicals. My chosen growing sites for harvesting dandelion and plantain are two nearby fields alongside a path that hugs the Chicago River through West Rogers Park. They are near a wooded area, and are overgrown with tall weeds and shrubs. While I do feel that it is safe to say that no one has used any products associated with lawn-care on these sites, I am concerned with the recent sprayings of insecticide that have been a part of the city's response to the rise of West Nile Virus. I am also concerned about the soil content, knowing that the site is near the very polluted Chicago River, and also only a few blocks away from a previously declared "chemical wasteland" area, (which about 10 years ago was developed into an elementary school). Indeed, verifying the safety of urban-gathered plants in a city as industrial as Chicago has proved to be a complicated process, and the facts about my growing sites are still mostly unknown to me.

That said, I still feel many positive effects related to the medicines that I made. I have been actively using the "Alternative Plantain Salve" for cuts, scrapes, and bruises. (I am a professional dancer so yes, I still get cuts, scrapes and bruises on a regular basis.) Honestly, I have noticed a strong correlation between expedient healing and application of the salve. I also experimented with making a poultice of plantain during a nature walk by chewing a few plantain leaves and holding them to a wound. This too proved effective. Several days later, a friend was stung by a bee and I instructed him in how to identify plantain, chew it to make a poultice, and apply it to the inflamed area. The swelling immediately decreased. Since making the salve, I even had a dream in which a child hurt his head and I wandered into the yard, guided by an instinct to pick from a particular plantain plant, and applied it to his wound. Many herbalists, including Susan Weed, talk about how dreaming is an expression of connection with the essential spirit of a plant, and how through dreaming, an intuitive relationship is formed. (Weed 85) I am very excited about this, and I recognize that it relates to the fourth principle of herbalism, which is that plants have spirits.

When drinking the dandelion tea I also had a strong experience. My relationship with dandelion is longstanding, and began with childhood bouquets. Since then they have always been a familiar face and, since I do little gardening, they have never truly

been an unwelcome one. However, the tea itself truly deepened my understanding and relationship with the plant. I felt its subtle but powerful effects with the first sip, and marveled in its somewhat oily embrace. How quickly I felt it interact with my body! I could feel my organs stir with new attention and motility. Dandelion truly is a powerful healer.

I am therefore very pleased with the results of this project, as I feel more appreciative of my local environment, and am experiencing the positive effects of homemade medicinal products. I am excited to continue to learn about the plants that grow in my community, form relationships with them, and respectfully educate myself about social and environmental affects of harvesting them.

Glossary of Images in Order of Appearance

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