

## **“The Harvest Is Plentiful”**

Matthew 9:37

Alethea Kenney, B.S. D. Vet. Hom.  
Reedbird Farm Icelandic, Black Welsh Mountain crossbred sheep  
Traditional Naturopath, Herbalist, Aromatherapist  
reedbird.com  
borealbalance.com

In northern Minnesota where I am, the summers are short and winters are cold and long, everyone wants to make the most of the summer season. Rather like the children’s book “Frederick” by Leo Lionni, gathering colors of experiences to tide us over during the dark, monotone winter is almost as important as preserving foods. In the book “Frederick”, the colors are ephemeral stories of the season past but I find that harvesting herbs and medicinals becomes a balm for my soul and gives me something of substance to remind me of God’s providence. To me, herbs are the physical reminder that God is indeed the Great Physician.

Gardening in the north can be a challenge and warm season vegetables may require a greenhouse to ripen before frost. Thankfully, the wild bounty is uniquely adapted to wherever it is growing, from coast to coast. Medicinal plants are available to everyone and their harvest and preparation is not difficult.

When I was young, my father and mother talked about their parents and grandparents picking wild greens or using plants medicinally but that information did not filter down through generations. Modernity invaded and people shunned the old ways and were misled into thinking that pharmaceuticals were more powerful, more scientific and more important than our wild medicinal plants harvested by hand in shimmering summer heat. While there is certainly a place for modern medicine, for many common ailments and conditions (particularly chronic conditions), medicinal plants can be used and may be even more effective than common, over-the-counter (OTC) medications. Wild plants have an advantage as well, in that they contain higher levels of nutrients than our conventional garden vegetables.

Because there’s a gap between generations who used wild plants regularly for food and medicine and our generation, many of us don’t have personal experience gathering plants for medicine and may be unsure enough that we hesitate to try it. I’m going to attempt to demystify that process and hope you will be inspired to make some medicinal plant preparations to use for your family and farm animals. Note that I use the word “herb” interchangeably with “medicinal plant” and this can refer either to a plant or spice you’d buy for flavor (but also has medicinal action) or a weed or wild plant you are harvesting for its medicinal use.

### **How to Harvest**

This section is partially adapted from an article on my website <http://www.reedbird.com/>

identification-and-harvesting.html For more information on scientific names and identification, please see the website.

### **A primer on botany:**

**Annual:** A plant which has a whole life cycle in one growing season, seed to plant to flower to seed.

Example: Calendula (*Calendula officinalis*)

**Biennial:** A plant in which the first year is a rosette (ring of sessile leaves). The plant overwinters then second year shoots to flower, to seed, and death of plant.

Examples: Burdock (*Arctium lappa*), yellow dock (*Rumex crispus*), evening primrose (*Oenothera biennis*)

**Perennial:** A plant that survives more than one season and returns each year to reproduce.

Examples: Alfalfa (*Medicago sativa*), red clover (*Trifolium pratense*)

**Woody plants:** Deciduous and evergreen trees and shrubs. It can be difficult to determine where a plant falls in this category.

Example: Poison-ivy (*Toxicodendron radicans*) can be classed as perennial or shrub and some shrubs may be sapling trees.

Rule of thumb, if it has multiple stems it is a shrub, not a tree (but then basswood *Tilia* stump sprouts when cut and can be mistaken for a shrub).

Flowering plants consist of roots, stems, flowers and leaves. Pay attention to all parts of the plant.

Stems have nodes and buds.

Roots can be:

- simple (dandelion *Taraxacum officinale*)
- creeping: a rhizome that is underground stem and gives rise to other plants
- corm: tuber on the end
- bulb: onion *Allium* species

Leaf arrangement:

- alternate: leaves alternate placement along the stem
- opposite: leaves are opposite one another along the stem
- whorled (*Galium* species)
- basal (dandelion)

Leaf type:

- simple: one single leaf attached to the stem
- compound: each “leaf” is referred to as a leaflet (walnut *Juglans nigra*)
- complex compound: the leaflets are subdivided into leaflets

Plants are classified according to similarity of structures, particularly flower structure; however, flowers are not the best way to identify plants in most cases since the flowers only appear for a short time each year or every few years. Medicinals are not typically harvested during flower stages so learn to recognize the vegetative state.

### **Responsible Harvesting or Wildcrafting:**

Be aware of your environment, wet areas and bogs are damaged merely by walking on them. Thankfully northern Minnesota does not have poisonous snakes but for everyone else, step on the log, not over it! The prevalence of tick-borne diseases is epidemic, wear protective clothing and check yourself carefully after walking out in the weeds and woods.

Take leaves off trees and shrubs from outer edges of plants. Remove bark from branches, not the core trunk and NEVER girdle a tree. Harvest where there are many of that species and leave at least eighty to ninety percent of the community or stand.

Try to leave no trace, return soil carefully, replant disturbed plants. Walk, don't take motorized vehicles as they cause soil compaction, erosion, pollution. If you aren't able to walk, use care in where you drive and do not destroy sensitive plant communities.

Do NOT harvest near roadways, wet areas drainage off parking lots or other polluted areas, sprayed fields or ditches. Herbicides are designed, in many cases, to be absorbed into the plant and travel throughout the plant structures. Plants can pick up heavy metals and incorporate them into their structure, becoming toxic even if you wash them.

Never harvest rare or endangered species, a list for your area is available from the Natural Resources Conservation Service (NRCS) office or Department of Natural Resources (DNR). Before harvesting on private property (that is not your own) get permission from landowners. If you plan to harvest on public ground, ask your local governmental agencies about state and recreational areas, a permit may be required for harvesting and some areas may prohibit harvesting. Public lands are often sprayed so be aware of your surroundings.

### **When to Harvest:**

If you want to harvest leaves (ex. mints) then usually do so before the plant flowers and in the morning just after the dew dries (there are exceptions). The Native Americans divided medicinal uses of plants into pre- and post-bloom. Remember that as the plant matures, energy moves from the roots to the leaves and then into reproduction for the next generation. Take advantage of this energy movement in your harvesting, harvest each part as the plant is putting most of its energy into that part. Don't harvest roots

when a plant is in flower, the energy and nutrients are in the flower structures, not the roots.

Flowers are best after they open completely in the morning after the dew dries.

Harvest seeds when they are fully ripe or after they have dried on the plant.

Fruit must be completely ripe and not decayed.

Avoid any part that is discolored, bug eaten, wilted, or damaged in any way. This changes the chemical composition of the part, plants release chemicals in response to injury just like we do.

Roots, if the plant is a biennial, are harvested the first year fall or second year early spring before leaf growth. Perennials are harvested in early spring or late fall when energy is in the root.

Bark is harvested usually in the fall but spring after sap rises can work.

These are guidelines and rules were meant to be broken. If you need a particular herb but the time is not perfect, go ahead and harvest it if the plant is healthy. But for storage and preservation try to follow the rules for best results.

## **Preparing the Harvest**

### **Types of Herbal Preparations in History**

People have been harvesting and preparing herbs for as long as people have lived on earth. We don't often use many of the more ancient preparation methods but I find them fascinating, so have included them here. I think they illustrate that there are almost as many ways to use herbs as there are peoples. The idea with these processes is to find a way to prepare the plant materials that preserves their medicinal properties in ways that are easy to use on or in the body. Methods are designed to provide long term storage, overwinter or even for several years.

The easiest method for many plants is simply to dry them out of direct sunlight. Once completely dried, the plant material can be stored in sealed containers (like glass jars used for canning) and stored in dark cupboards. An even easier way to accomplish this is to hang stalks upside down in dark areas of a house or clean shed. You want to make sure the plants don't mold. This is not unlike drying and storing hay, check plant material to make sure it is drying properly and store carefully. If you do this, you will have bundles of fabulous-smelling herbs for winter use.

I don't use a dehydrator. Most dehydrators run too hot and volatile oils become airborne, you lose much of your medicinal action. In my experience, plants dry quickly in the dehydrator and retain their color better than those hung up to dry. But those dried

in dehydrators have no scent left, unlike those dried more slowly by hanging. If you have a way to use a dehydrator that doesn't overheat the plant materials, this is worth a try.

Other ways to preserve herbs are listed below. My favorites are drying, tinctures and salves but the traditional methods have value and should be remembered.

### **Herbal vinegar:**

Similar in nature to water, vinegar contains acetic acid which acts as a preservative; however, vinegar is not as reliable as a tincture (see below) for long term storage (Green, 2000, pp. 81-82).

Any of the vinegars can be used and will extract alkaloids and water-soluble components or replace alcohol in tinctures (Green, 2000, p. 87). Modern science dislikes the "foreign matter" floating in vinegar (we call this "mother") and replaced its use with acetic acid but this is not necessary for home use as the matter in vinegar is not foreign but a part of the process of change in plant material (Green, 2000, p. 87).

During the 17th century plague, the "Vinegar of the Four Brigands" became famous for its use by thieves in protecting themselves against the plague while they robbed plague victims' houses and bodies (Fischer-Rizzi, 1996, p. 11). Many recipes from the 11th century calling for vinegar survive in Hildegard's writings on herbs and while they are fanciful and the plants not known for certain, the use of vinegar is certainly vindicated (Bingen, 2001, p. 68, 83, 93, 119, 126, 158). Nicholas Culpeper (famous English physician) lists recipes using vinegar, again a 17th century confirmation (Culpeper, 1990, p. 292).

### **Wine:**

Similar to vinegar in use and extraction of constituents, wine has a long history of use with herbs but once again, its variable nature has lost it favor in the modern pharmaceutical arena (Green, 2000, p. 88). One advantage to wine is that with the resurgence of home-brewing, we have access to wines without having to buy a commercial product. There's something warming about that!

Culpeper gives formulas for herbal wines including wormwood (*Artemisia absinthium*), rosemary (*Rosmarinus officinalis*) and eyebright (*Euphrasia officinalis*) (Culpeper, 1990, p. 291). Susanne Fischer-Rizzi also lists medicinal wines, including one for warming the stomach involving angelica root (*Angelica archangelic*) and sweetflag root (*Acorus calamus*) (Fischer-Rizzi, 1996, p. 17). During the period when Hildegard was writing her herbal lore, wines were the liquor of choice for steeping herbs and many of her recipes reflect this (Bingen, 2001, p. 27, 31, 49, 50, 56, 58, 59, 60, 68, and many others). Elderberry (*Sambucus nigra*) wine has a history that spans not only centuries but continents. It was used in Scotland for treating catarrh, flu, asthma, coughs and colds, fever and sciatica, while Culpeper made decoctions of root and berries in wine for a wide array of conditions (Culpeper, 1990, p. 68; Darwin, 2000, p. 91).

## **Honey or Electuary:**

Considered by Juliette de Bairacli Levy in her book "Nature's Children" to be of tonic use in almost all ailments, it is assimilated directly into the bloodstream from the stomach (Levy, 1997, p. 77). Great care should be taken now to obtain honey from hives not treated with chemicals, which is not easy to find. Keeping bees is a great addition to the farm!

Emollient, nutritive, laxative and demulcent, honey has traditionally been used alone as a carrier for herbs or as a tasty addition to many herbal preparations (Green, 2000, p. 244). Electuaries are herbal preparations made by mixing honey with the herbal powder and rolling it into a ball for easy eating (Alfs, 2007, p. 1118).

Father Kneipp, the German naturopath, believed adding honey to herbal remedies would enhance their absorption by the body (Green, 2000, p. 244). Honey has been traditionally added to herbal preparations both for flavor, consistency and for the above reasons. Hildegard often cites honey as part of a recipe, but cautions that its use as food causes decay in the body of an obese person while eating the wax causes melancholy, perhaps a foresight into the problems with high sugar diets (Bingen, 2001, pp. 154-5).

Modern precautions for honey: Do not feed to children under two years old because of risk of botulism.

## **Salves (fat-based external preparations):**

Salves are known by several names and consistencies but the main idea is an ointment applied to the skin providing healing or protective effects (Green, 2000, p. 202). I prefer salves for external use, particularly for animals since they are easier to use than a poultice that must be held in place. Not so easy to do when treating mastitis in a cow (which should be addressed holistically as well as treating acute symptoms.)

Salves in their various forms have been used throughout history and are referred to in the Bible as well as many traditional herbal texts. Jeremiah 8:22 "Is there no balm in Gilead; is there no physician there?" Again in Jeremiah 46:11 "Go up into Gilead, and take balm, O virgin, the daughter of Egypt; in vain shalt thou use many medicines; for thou shalt not be cured." Matthew 26:7 "There came unto him a woman having an alabaster box of very precious ointment, and poured it on his head, as he was eating." (Zondervan, 1987, p. 728).

An easier form of salves is poultices where the herbs are simply heated with a carrier, applied to a cloth and placed on the body (Levy, 1997, p. 10). As I mentioned above, poultices are fine for people willing to hold an herb in place but less useful for fidgety animals.

Chickweed was a common herb made into ointments for all types of inflammations,

ulcers and abscesses or occasionally used fresh, heated and applied (Darwin, 2000, p. 94; Culpeper, 1990, p. 48; Bingen, 2001, p. 136).

One way to make a salve is to heat the herb of choice in an oil or fat (vegetable or animal), allow to steep, strain and add beeswax or cocoa butter (some type of edible wax), a few drops of a healing essential oil and/or vitamin E and pour into jars (Green, 2000, pp. 202-3). This is actually a very simple process.

Salves can be sold as yet another way to diversify income on the farm. The Food and Drug Administration (FDA) right now classifies salves as cosmetic, which means that as long as you make no claims about efficacy, you can sell them like you would handmade soaps. The FDA requires all kinds of things to do this but most important is to avoid any type of diagnostic or prescriptive language. In other words, don't describe your salve as medicinal or explain what ailments it might treat. Instead, describe your salve as something healthy, supporting, soothing or calming. Use words like moisturizing and emollient, avoid words like antiseptic, antibiotic, or healing. This makes selling herbal salves tedious but it can be done. Check FDA regulations before attempting to sell any herbal products, the list of requirements can be daunting but it's worth complying to avoid later hassle and cost if the FDA comes to check your wares.

### **Tea:**

While we now think of teas as water-based, milk was a carrier used more commonly in the past than it is today, especially a fresh goat or sheep milk. Levy gives directions for pounding herbs into fresh unpasteurized milk (Levy, 1997, p. 7). In an interesting twist, Hildegard recommends drinking goat milk then eating powdered lily stem and leaves for rash, but apparently the herb was not added to the milk (Bingen, 2001, p. 27).

Teas made from boiling and steeping herbs in water were very common and Culpeper lists recipes for almost all herbs in his reference that involve tea as one method of administration (Culpeper, 1990). Nettle (*Urtica*) is one herb universally used as a tea (partly because the heat destroys the stinging property). Culpeper lists its uses for lung conditions, sore mouth, urinary problems and parasites, among others, while the Scots drank it as a tea, used it in soups and as a syrup (apparently alcoholic) (Culpeper, 1990, p. 127; Darwin, 2000, p. 172).

A plethora of compound formulas and simples are listed in Fischer-Rizzi's book as teas, including a compound of calendula (*Calendula officinalis*) and sweet clover (*Melilotus officinalis*) tea as a lymph remedy (Fischer-Rizzi, 1996, p. 43). Raspberry (*Rubus* spp.) leaf tea is almost universal for aiding childbirth, the people of Scotland used it in this way as does Juliette de Bairacli Levy (1997) in "Common Herbs for Natural Health" p. 130-131 (Darwin, 2000, p. 157)

### **Directions:**

#### **Tea:**

While there are more precise ways to make an herbal tea, taking a double handful of fresh or a single handful of dried herbs to a pint of water and bringing to just under a boil before covering and allowing to steep is about the easiest.

Levy in "Nature's Children" (1997) describes amounts as one heaping teaspoon but does not specify dried or fresh (p. 76).

Tea can consist of one herb or several. Roots, barks, berries, leaves or flowers and should be prepared in glass, stainless steel or earthenware, not something that may leach into the tea. The tea does not need to be strained unless desired.

Store teas in the refrigerator for up to three days (or until they turn cloudy). Slight differences in preparation between leaves and flowers versus barks and roots (and dried berries) should be noted. Flowers or leaves need only be simmered for a few moments before removing from the heat while coarser material must be left to simmer for up to twenty minutes.

Infusion vs. Decoction: Shorter simmering times are referred to as infusions, simmering for longer periods (as for roots, bark or dried berries) is called decoction.

Teas can also be prepared using the compound or simpling methods. Compound is a formula of more than one herb, a blend. A simple is only one herb prepared at a time. I will explain more about making formulas in another article.

### **Salve:**

Although technically there are differences in salves, ointments and lotions, the basic recipe here can be used for many external conditions and adapted for many types of herbs.

Take the amount of herbs to be used, cover with oil (I like olive oil), heat gently for at least twenty minutes (but not boiling) and then cover and let stand for several hours. Strain the herbs out of the oil, add beeswax and melt it into the oil. As the mixture cools, add in a few drops of essential oil (if you want, or make your own oil of spruce, pine or fir resin) and a few drops of liquid vitamin E for preservative. Pour this liquid into jars and let set.

If the salve is too runny, reheat (gently) and add more beeswax (Green, 2000, p. 203).

Choose your essential oils based on use of salve, a disinfecting first aid salve with white cedar (*Thuja occidentalis*) could have any of the pine (*Pinus* spp.), spruce (*Picea* spp.) or fir (*Abies* spp.) essential oils added, while a comfrey (*Symphytum officinale*) salve might benefit from lavender (*Lavendula* spp.) essential oil or either of the chamomile essential oils (*Matricaria* or *Anthemis*).

### **Tincture:**



A mixture of alcohol and water is commonly used (remember that fresh plants do contain some water so take this into account when deciding how much alcohol you want) and the percent of each can vary (Green, 2000, p. 146).

Glycerine is a substitute I find useful for tinctures destined for animals, children or those with sensitivity to alcohol and Green gives instructions similar to those for alcoholic tinctures (Green, 2000, p. 187).

The folk method for tinctures involves filling the jar part way with herbs, covering with the alcohol or glycerine mixtures and letting this sit for two to six weeks (Levy, "Common Herbs for Natural Health", 1997, p. 7). Some people shake the jar daily, some ignore it completely, some believe you need to strain the plant materials out after a time and others leave them in (Green, 2000, p. 149; Levy, "Common Herbs for Natural Health", 1997, p. 7). Some people leave the mixture in the sun and some won't let sunlight touch the jar. All of these methods should indicate that there is room for personal preference and experimentation in making herbal tinctures and there is no one right or wrong way.

Note, when buying tinctures, you see a ratio on the label, ex. 1:5. This means twenty grams (weight) of dried herb are in each 100 cc (volume) of tincture (twenty percent or 1:5). A 1:10 is fifty percent or ten grams dried herb to 100 cc tincture, 1:2 is fifty grams of fresh herb to 100 cc tincture. In this case, a high proof alcohol is used, like 190 (Green, 2000, p. 147). In ounces, the 1:5 correlates to two ounces of herb to 300 mL tincture. You can replicate this at home or simply follow folk methods for a useful, but less precise tincture.

## **Recipes:**

### **Tea Infusion:**

German or Roman chamomile (*Matricaria recutita* and *Anthemis nobilis*): One half to one teaspoon dried chamomile blossoms to a pint of water, bring to boil, cover, turn off heat. Useful to relax, as an astringent for diarrhea or for upset stomach.

Compound:

Equal parts of each (about one half teaspoon each herb) to pint of water, bring to boil, cover, turn off heat

Example:

Lavender (*Lavandula* spp)

German or Roman chamomile (*Matricaria* or *Anthemis*)

Hawthorn leaves and blossoms (*Crataegus* spp)

A good, relaxing nervine formula that benefits the heart, digestion and helps lighten

mood.

### **Tea Decoction:**

Simple:

Dandelion root (*Taraxacum officinale*): One teaspoon to a pint of water, bring to boil, turn down heat, cover, let simmer for ten minutes. Alternately, use a pint and a half of water, simmer uncovered until only one pint of water remains.

Larger, tough roots, dried berries, etc. can be soaked for several hours before using.

Compound:

Equal parts (by volume) about one half teaspoon each plus pinch of demulcent herb, bring to boil, turn down heat, cover, let simmer for ten minutes.

Example (detoxifying blend)

Yellow dock root (*Rumex crispus*)  
Dandelion root (*Taraxacum officinale*)  
Burdock root (*Arctium lappa*)  
Pinch of powdered ginger root (*Zingiber officinale*)

Great for supporting the liver, gallbladder and kidneys.

### **Tinctures:**

Take fresh or dried plant material, in small pieces, cover with alcohol (or other extracting substance) and let stand for two to six weeks, you can shake this daily if desired.

Example:

Thyme (*Thymus vulgaris*): Take fresh or dried leaves (remember that fresh plant material contains more water so your alcohol should be higher proof) put in pint jar, cover with vodka (forty percent or higher), shake daily for at least two weeks. This can then be strained if desired, liquid bottled in half ounce dropper bottles and labeled for later use.

An excellent tincture for digestive problems, coughs and colds and viruses.

### **Salve:**

Cedar salve:

White cedar leaves (cut off stems) (*Thuja occidentalis*)  
Olive oil

Beeswax  
Vitamin E

Black spruce essential oil (or a similar essential oil) (*Picea mariana*) or make your own oil by soaking spruce resin in olive oil

Cover the cedar leaves with olive oil, simmer covered for about twenty minutes then allow to cool. Strain leaves out, add one part beeswax to three or four parts infused oil. Reheat this until wax is melted, add a few drops essential oil and vitamin E. Pour into jars or salve tins.

White cedar has antifungal, antibacterial and antiviral properties, making the salve ideal for wounds, burns, skin infections.

(Thompson, 2006 pp. 46-50).

In the next article, I'll explain how I make formulas and decide on dosage for people and animals. In the meantime, enjoy collecting colors to soothe your body and soul this winter.

### **References:**

Alfs, M. (2003). *300 Herbs: Their Indications and Contraindications*. MN: Old Theology Book House.

Alfs, M. (2007). *Western Herbalism Certificate Program, Vol. 2*. MN: Old Theology Book House.

Bingen, H. (Hozeski, B. translated). (2001). *Hildegard's Healing Plants: Physica*. MA: Beacon Press.

Culpeper, N. (1990). *Culpeper's Complete Herbal and English Physician*. IL: Meyer Books.

Darwin, T. (2000). *The Scot's Herbal: The Plant Lore of Scotland*. UK: Mercat Press.

Fischer-Rizzi, S. (1996). *Medicine of the Earth*. OR: Rudra Press.

Green, J. (2000). *The Herbal Medicine Maker's Handbook*. CA: Crossing Press.

Levy, J. (1997). *Common Herbs for Natural Health*. NY: Ash Tree Publishing.

Levy, J. (1997). *Nature's Children*. NY: Ash Tree Publishing.

Thompson, P. (Winter 2006). "Comforting Conifers." *Herb Quarterly* pp. 46-50.

Wood, M. (2008). *The Earthwise Herbal: A Complete Guide to Old World Medicinal Plants*. CA: North Atlantic Books.

Zondervan. (1987). *New International Bible Dictionary*. MI: Merrill C Tenney.