

Herbs From Today's Workshop

Aloe (Aloe vera) Tender perennial succulent native to North Africa and one of the most common Aloes worldwide. It thrives in the shade outdoors or in almost any window, just waiting for someone to need the cooling, soothing gel which may be squeezed from the leaf. Used for cooling burns, treating sunburn and chapped skin, and taken internally where its mucilage soothes the digestive tract, reduces pain from ulcers, and speeds healing. Propagate by separating off little plantlets and be sure to protect from frost by bringing in for the winter.

Anise Hyssop (Agastache foeniculum) Hardy herbaceous perennial that grows about 24 to 36 inches tall with spiky purple flowers. Native to northern US. The flowers are a rich source of nectar, and bees, butterflies and hummingbirds love it. True to its name, the leaves of anise hyssop have a scent reminiscent of licorice or anise, and the plant is also called "licorice mint." Used dried or fresh for tea or even to flavor a salad or other dishes. Easily grown from seed. A must have for attracting beneficial insects!

Ashwagandha (Withania somnifera)- Ashwagandha in Sanskrit means "horse's smell," probably originating from the odor of its root which resembles that of a sweaty horse. It is one of the most vital of herbs used in Ayurvedic medicine. It is considered an adaptogen and used in the way that ginseng is used in traditional Chinese medicine. Also to strengthen the immune system and to enhance sexual potency. A tender perennial treated as an annual. Started from seed each spring and roots harvested in late fall. Washed and used fresh or chopped and dried for later use in tinctures. Produces copious amounts of seeds for saving for the following season.

Calendula (Calendula officinalis)-Calendula flowers are the premier antiseptic and healing agent when made into salve, tincture, or simply masticated and applied to the injury. Inhibits inflammation, promotes formation of granulation tissue in wounds. Effective for treating and healing cuts, scrapes, scars, bruises, and burns, as well as minor infections of the skin. Annual easily grown from seed each year.

True Comfrey (Symphytum officinale) Hardy herbaceous perennial native to Europe. This is the purple flowered type that grows true from seed...compared to the Russian Comfrey, which must be propagated from cuttings. If you don't want the plants to spread (which they do !), then cut them back when they flower, and mulch the crowns with the leaves. This will keep the seed from maturing and dropping, and will quickly improve the soil and contribute to the formation of large, healthy, happy plants. The roots and leaves contain allantoin, which helps cell proliferation, and so are a major ingredient in lots of great healing salves. Use internally...with proper caution, but it makes a fine animal fodder and incredible compost builder.

Catnip (Cataria nepeta)-Sedative and calming tea; aromatic, favorite of cats and children. The inhabitants of Southern Appalachia have used it since the eighteenth century as a remedy for cold. Tea made from catnip has been used to relieve intestinal cramps and gas discomforts. Catnip has been used for relief of insomnia and prevention of nightmares. Easy to grow perennial easily grown from seed.

Echinacea (Echinacea purpurea) Hardy herbaceous perennial originally native to a wide band of the central US. Today it's uncommon in the wild, but widely cultivated, and easy to grow from seed. This is

the species best suited to diverse growing conditions...even pots...but always full sun. The herb works best as a tincture of the fresh root, used at first sign of any kind of infection to stimulate the immune system and shorten the period of infection. There are many other native species available and most are used interchangeably.

Elderberry (*Sambucus canadensis*) Native, perennial, deciduous large shrub to small tree . The berries are delicious and rich in anthocyanins, bioflavonoids, vitamins and antioxidants. The syrup or tincture of these berries is excellent for treating the common cold and for overall increase in immunity. The fresh green leaves may be infused in olive oil to make a salve for treating sunburn, rough skin, age spots, and/or diaper rash. The flowers can be used for making tea and wine, and if left, turn rapidly into heavy clusters of fruits. Now that's a versatile provider. Elderberries are best grown as an understory plant in part shade, and planting 2 plants for pollination will generally produce better crops than a single plant.

Garlic (*Allium sativum*) Native to central Asia, and used as both food and medicine in many cultures for thousands of years. It is easy to grow by planting individual cloves in the ground in the fall, harvested the next summer, although it can become naturalized (perennial) if you don't dig it all each year!! Likes well drained soils and sunny locations .Garlic flower scapes are removed to focus all the garlic's energy into the bulb. These interesting scapes can be eaten raw or cooked. One of the oldest uses of garlic is as an antibiotic. It kills a range of microbes, including viruses, bacteria, fungi, and parasites. Also used to lower cholesterol and blood pressure.

Ginger (*Zingiber officinale*) Ginger cultivation began in South Asia and has since spread to East Africa, the Caribbean and beyond. It's a tender perennial so we grow it in pots to take in during the winter. Grown from the fleshy rhizomes which are harvested for many culinary and medicinal uses. Tea brewed from ginger is a common folk remedy for colds. It's known to provide relief of nausea, and ginger ale has long been used to settle the stomach. Besides, what would the holidays be without gingerbread cookies!

Horseradish (*Cochlearia armoracea*) Hardy herbaceous perennial. Grated fresh horseradish with a little vinegar and salt... makes a fine condiment. Helpful for sinus infections and as a mild antibiotic as well. Such an easy plant to grow preferring full sun and well drained soil for formation of long, healthy roots. Easily started from root pieces in early spring, or by division of the crown...Dig, harvest some , replant some!

Hyssop (*Hyssopus officinalis*) Hyssop has been in use since classical antiquity. It is an evergreen bushy herb growing 1 to 2 feet and easily started from seed. The plant produces bunches of blue fragrant flowers which are harvested during the summer. Has soothing, expectorant and cough suppressant properties and has a wonderful intense minty aroma. Is a native of Southern Europe The flower-tops are most often steeped in water to make an infusion. Also has been hung in homes to provide protection from the evil eye!

English Lavender (*Lavandula angustifolia*) Hardy perennial native to the western Mediterranean. Generally likes drier climates and definitely well drained soil is required. In some conditions it can be short-lived. It yields a strong essential oil that is used in balms, salves, perfumes, cosmetics, and topical applications. Flowers yield abundant nectar from which bees make a high-quality honey. Flowers can be

candied and are sometimes used as cake decorations. Lavender flavors baked goods and desserts and it pairs especially well with chocolate.

Lemon Balm (*Melissa officinalis*) Hardy herbaceous perennial native to the Mediterranean, Russia and Middle East. It's a classic medicinal, soothing, refreshing tea herb. Easy to tincture, it's claimed to have antibacterial and antiviral properties. Often used as a mild sedative or calming agent and shown to improve mood and mental performance. It also has exceptionally high antioxidant activity. Easily started from seed and grows just about anywhere...it is a mint after all. Harvest leaves before flowering and use fresh or dried...But leave some flowering as the bees adore it...Melissa!!!

Peppermint (*Mentha piperita*) Hardy perennial cultivated worldwide. They do spread vigorously, so keep in a pot if you don't want a big patch. Prefers full sun to part shade and moist soils spreading joyfully, delighting the palate, and uplifting the spirit. The bees think so too! A most excellent tea herb. Cut during early flowering stage, bundle, hang, and dry, strip the leaves and flowers, and store in jars for year round enjoyment. Peppermint from seed produces highly variable offspring, so propagate the good ones by cuttings.

Roman Chamomile (*Chamaemelum nobile*) Hardy perennial ground cover. Native to Europe. Cultivated worldwide. Plants grow thickly to interlock, forming an aromatic lawn. A nice place for an afternoon nap and happy dreams! Plant prefers full sun. If not mowed, the chamomile will go up to flower at about 12 inches or so, aromatic and pleasant, worthy of tea, but not as prolific as German Chamomile with which it is medicinally interchangeable. Chamomile teas and tinctures are used for stomach troubles and colds, as well as the usual anxiety and sleeplessness.

Roselle (*Hibiscus sabdariffa*)-Throughout tropical regions of the world, roselle calyces are harvested to produce a drink high in vitamin C and anthocyanins. Also, since many untrained consumers mistake the calyces of the plant to be dried flowers, it is widely, but erroneously, believed that the drink is made from the flowers. It is prepared by boiling dried calyces of the Roselle plant in water for 8 to 10 minutes (or until the water turns red), then adding sugar or honey. It is often served chilled.

Stinging Nettle (*Urtica dioica*) Herbaceous hardy perennial found native world-wide. In the early spring find Nettles along with the other great spring tonic plants. Used as spring vegetable or tea, the fresher the better, it cleanses and builds the blood. Nettles are especially rich in trace minerals, potassium and chlorophyll. Cut only young shoots, once they get older they are inedible. Lightly steam to disarm their stinging hairs. Plant grows 4-5' tall in moist soil in sun or shade. Seeds prolifically!!

Thyme (*Thymus serpyllum*)-Thyme is one of the sources of the antiseptic essential oil known as carvacrol, which (along with other terpenoids such as thymol) inhibits several kinds of nasty bacteria. Makes an excellent tea that has strong antimicrobial and antitussive activity. The practice of using Thyme in medicine has been largely subsumed by its use as a culinary, but it is worthy of reintroduction into our materia medica. Hardy perennial

Tulsi , Holy Basil (*Ocimum sanctum*) Growing these tender perennials is easy from seed and you can experience the beauty, aromatic, medicinal and spiritual attributes of these excellent sacred plants. There are several strains, Krishna, Rama, and Kapoor among them, for making wonderful teas and tinctures. Tulsi is considered to be adaptogenic and among the many uses are the following: stress reduction,

immune enhancement, promoting longevity, increasing endurance, fighting infections, and improving digestion. They're also a rich source of bioavailable vitamins and minerals.

Turmeric (*Curcuma longa*) Turmeric is a tender herbaceous perennial in the ginger family. Native to tropical India. Grown for its rhizomes, and propagated from those as well. It is dried and ground into an orange powder commonly used as a spice in Indian cuisine and to impart color to mustards. In India, turmeric has been used traditionally for thousands of years for its antimicrobial property. The active compound curcumin is believed to have a wide range of biological effects including anti-inflammatory, antioxidant, antitumor, antibacterial, and antiviral activities.

Valerian (*Valeriana officinalis*) Hardy herbaceous perennial. Native to Europe and Asia. One of the strongest herbal sedatives and is used for sleeping disorders, restlessness and anxiety, and as a muscle relaxant. All parts of the plant are active, but the tincture of the fresh root is the most common form. Prefers full sun to part shade and moist but well-drained soil and adapts well to a wide range of conditions. 3-4' tall honey scented white flowers enticingly scent on a warm afternoon. It is enough to give even the bees a BUZZZZZZZZZZZZ.

Yarrow (*Achillea millefolium*) Hardy herbaceous plant native to temperate regions of the Northern Hemisphere. Since antiquity, yarrow has been used in stanching the flow of blood from wounds. The Greeks and Romans used it to stop their soldiers from bleeding in battle. The plant also has a long history as a powerful 'healing herb' used topically for wounds, cuts and abrasions as an analgesic and antibacterial. Another ingredient in our "Boo Boo Goo" salve. It is also a great companion plant, attracting beneficial insects and making its neighbors stronger. The plant has a strong, sweet scent, similar to chrysanthemums and white flowers in large flat topped clusters. Easily propagated by seeds or division.

Yellowroot (*Xanthorhiza simplicissima*) Hardy woody deciduous perennial native to Eastern US and found growing in sun or shade most often near streams. It spreads by rhizomes to form colonies and is propagated by division. It contains the alkaloid berberine, which has a number of traditional and contemporary uses for medicine as an anti-inflammatory, antimicrobial, astringent, and antibiotic. Often called poor man's Goldenseal, this is not Goldenseal...but is used in a similar way, for infections, colds, flu, sore throats, mouth sores, colitis, stomach problems. This is one of my absolute favorites! Make a decoction, let set overnight, strain, bottle, refrigerate, then take (mixed w/orange juice)...I take a pt to qt a day as needed.

Fire Cider is a traditional folk medicine using some of these plants. The tasty combination of apple cider vinegar infused with these powerful immune-boosting, anti-inflammatory, anti-bacterial, anti-viral, decongestant, and spicy circulatory movers makes this tangy and sweet recipe easy to incorporate into your daily diet to help boost the immune system, stimulate digestion, and get you warmed up on cold days. Because this is a folk preparation, the ingredients can change depending on when you make it and what's growing around you. Our standard base ingredients are apple cider vinegar, garlic, onion, ginger, horseradish, cayenne peppers and lime. Grate or chop ingredients, place in vinegar, let infuse for a month in cool dark, strain (or not...we don't!) and use as needed or daily 1-2 T. Store in refrigerator. Oh...yeah

Making Plant Medicine...Teas, Tinctures and Salves

Herbal medicine has long been considered “the people’s medicine” for the accessibility, safety and ease with which remedies can be made. Throughout history, if someone wanted a particular medicine, they needed only grow it in their garden or find a place where it grew naturally and could be gathered. Thoughtfulness was required about when to harvest the plant, and often the recipe had been passed down for generations. These practices are environmentally and financially sustainable and remain a cornerstone of herbal medicine. There is also something to be said about getting involved in your own health.

In this workshop we are going to focus on some simple basic methods for making teas, tinctures and salves. Remember that this is a very ancient science and art. There is much to learn, but it’s important that you get started, and then grow your skills and knowledge. Although all cultures on earth use plant derived medicines, we are not offering medical advice to you as individuals, and do not accept responsibility for the use or misuse of any herbal information presented.

It would be wise to **start by defining some terms** we’ll be using in the various processes.

1. Herb- Simply a plant. In our case any part of any plant used in herbal therapy.
2. Infusion- To extract certain properties of herbs in water (as in simple teas) or in oils (as in infused oils used in salves). The extraction process is enhanced by the use of gentle heat.
3. Decoction- Basically a simmered tea, useful for extracting properties from roots, bark and seeds that don’t readily give up their constituents in a simple infusion.
4. Tincture- An herbal extract produced by steeping chopped or ground herb in a liquid menstruum, thereby infusing the liquid with the active constituents of the herb.
5. Menstruum- The liquid portion of the tincture, or the solvent, usually consisting of alcohol, and or, water, but may also be apple cider vinegar or vegetable glycerin.
6. Maceration- The process of steeping the ground/chopped herb for a period of time (usually several weeks) sufficient for the liquid portion to become saturated with the extractives. For tinctures it is usually best at room temperature in a dark space. For infused oils it is in a dark but warm space.
7. Pressing- The process where the macerated extract is thoroughly squeezed or expressed, separating the liquid from the solids. It can be done by hand using several layers of cheesecloth or by using a special tincture press.
8. Settling and Decanting- Crude tinctures that have been pressed must be allowed settle overnight and then be slowly poured off, or decanted, through a coffee filter or cheesecloth, thereby leaving the sediment behind.
9. Storage- Tinctures may be stored for fairly long periods of time (up to several years) depending on how they are made. This is ideally done in amber bottles at room temperature and out of sunlight.

10. Labeling- A very important part is to properly label the products throughout the process with the date and ingredients. More in depth information is best kept in a notebook.

Teas:

There is something particularly pleasing and delightful about making a tea with fresh leaves and flowers, particularly if you have grown or gathered them yourself.

The simplest way is to place some finely chopped fresh herbs into a quart jar, cover with just boiled water and let it stand and steep until cool enough to drink. It can be strained and enjoyed with honey if you like. Pouring hot water over 1 tablespoon of dried herbs in a cup and allowing to steep for 5-10 minutes and straining is a common way to enjoy those herbs collected earlier and dried.

In some cases, such as with roots and bark, the tea must be simmered, in a decoction, in order for the plants to give up their constituents. For instance, put a handful of dried herbs in a quart of cold water in a saucepan, cover and set aside for an hour, then bring slowly to a low boil and simmer for 15 minutes. Strain and use hot or cold.

Today we have a decoction of Yellowroot Tea (*Xanthorhiza simplicissima*), and a tea of the dried calyxes of Roselle (*Hibiscus sabdariffa*) along with our own raw unfiltered honey.

Salves:

Herbal oils are the primary ingredient for making salves. To make an herbal oil, or an infused oil, fresh or dried herbs are steeped for a period of time in vegetable oil using gentle heat to aid the extraction. Herbal oils are not the same as essential oils.

Here are the general **procedures for making an infused oil** of fresh herbs:

1. Finely chop the fresh herb. Weigh it and place in a crockpot (or other macerating container).
2. Cover with the measured amount of oil (olive oil is our standard) and mix thoroughly. If using measurements, generally add 3 ml of oil for every gram of herb...so 300 grams of herb would take 900 ml of oil (or about a quart which is 960 ml)
3. Maintain approximately 110 degrees for a period of 1-2 weeks. Stir or shake daily. We find that the lowest setting on a crockpot is too high. We only use it to initially heat the mixture, consequently placing it in that wonderfully warm cabinet over the refrigerator. We have also used a heat lamp and covered the jars with a cloth. Warm and dark is the idea.
4. Pour off the warm oil-herb mixture through several layers of cheesecloth over a bowl and squeeze out the oil. A tincture press can be used if available.
5. Pour the crude oil into a clean dry jar. Cover and allow to settle overnight.
6. Carefully decant the oil through several layers of cheesecloth into another clean jar, leaving behind the sludge in the bottom.
7. Store the oil in a labeled, amber bottle in a cool place out of the light.

Now here are the **procedures for making an herbal salve** using the infused oil:

1. Measure and pour the infused oil into the crockpot. Bring the temperature of the oil to 150 degrees.
2. On a table nearby, set out the sufficient number of dry, clean, labeled salve tins or jars to accept the volume of salve being made.
3. In a separate double boiler, slowly melt the appropriate amount of beeswax until it is fluid. Use approximately 10 grams of beeswax for every 100 ml of oil. Never do this directly on the burner and be very careful of overheating the wax. Remember it is flammable.
4. Slowly pour the melted wax into the hot oil, stirring constantly with a wooden spoon.
5. Once the wax incorporates into the oil, immediately remove from the heat and carefully fill the tins.
6. Clean your pans, utensils and edges of tins with paper towels before the wax congeals
7. Allow the tins to sit until the salve hardens which doesn't take too long. Cover and store in a cool dark place.

Today we are making a healing salve that's good for minor wounds, scrapes, chapped skin, diaper rash etc. Into the olive oil we are infusing dried Comfrey leaf and Calendula flower. We are then adding Beeswax, Unrefined Fair Trade Shea Butter, and some tea tree essential oil.

Tinctures:

1. Collect the herbs you want to make into medicine. Gather them at their peak time for maximum benefit. Flowers and leaves are best picked midmorning after the dew has evaporated. Try to get the best herbs you can... flowers in their early stages and leaves just prior to flowering. Generally they can be used fresh or dried. It's nice to have dried herbs for later in the year. Fresh herbs work best in some instances though. We dry larger things like lemon balm or holy basil in the attic where it's warm and dry and dark. For smaller things like flowers, we use a solar dehydrator. You do not want to dry your herbs in the sunlight because it will destroy some of the beneficial properties. Once the herbs are dry they can be crushed up or put through a food processor and then stored in a jar. The herbs should then be stored in a cool dark place.
2. Chop the fresh herbs, or grind up the dried herbs. You may use a knife and cutting board, a mortar and pestle, a coffee grinder, or a food processor. The general idea is to increase the surface area for extraction. It works best to chop if you are pressing out by hand and use the food processor if you are using an herb press.
3. Place the herbs in a glass jar that is labeled with the date and the name of the plants. A more exact method is to weigh the herbs (in grams). If I'm doing this I also write that info on the label.
4. Add sufficient liquid menstruum to cover the herbs. If you are measuring, then use 2 ml of menstruum for every gram of herbs (1gr herb: 2 ml Liquid). In general, 100 proof vodka makes the best menstruum. It can be used straight for fresh herbs or diluted with distilled water (50:50) for dried herbs. If you are using something like 80 proof vodka don't dilute it.

It's best to use unflavored spirits. Tinctures work best if they taste like the herbs. There are lots of different thoughts and ideas on exactly what makes the best menstruum in each different situation. Start simple...don't let the calculations keep you from proceeding...and then refine your processes.

5. Cover the jar and place it in a dark place at room temperature. Shake it at least once a day.
6. After 2-3 weeks, express the liquid into another clean glass jar. This is done by pouring it through several layers of cheesecloth and gathering the corners and squeezing it out...or by putting it through a tincture press if one is available. The press will obviously express more liquid. When doing it by hand it helps to set a strainer on top of a bowl or large measuring cup and line your strainer with the cheesecloth. Dump the contents of the jar into the cheesecloth. Use something like a chopstick to help pull the herbs out of the jar and then fold the four corners of the cheesecloth up into your hand and give the ends a twist. Continue to press the herbs until you cannot press out any more liquid.
7. Allow the liquid to settle overnight, then decant the clear liquid through cheesecloth or a coffee filter paper into a clean jar, leaving the sediment behind.
8. Store in properly labeled amber glass bottles out of the light.

Today, our tincture is a nice gently calming tincture made from Lemon Balm (dried herb). Typical adult dosage might be 1 dropperful 1-3 times a day. Enjoy!

Sources:

The following are **a few of our favorite sources**, and the ones used for this workshop:

Strictly Medicinal Seeds (formerly Horizon Herbs), Williams, OR <https://strictlymedicalseeds.com/>

The source of the seeds from which we grew the herbs we used. Also our source of inspiration and information in the form of their book Making Plant Medicine by Richo Cech. Great catalog!

Brushy Mountain Bee Farm, Moravian Falls, NC www.brushymountainbeefarm.com – Our best source for Beeswax. Also other supplies and good catalog.

Specialty Bottle Supply, Seattle, WA <http://www.specialtybottle.com/> Source of our containers-bottles and tins...very reasonably priced.

Sam's Club is the source of reasonably priced Olive Oil and the ABC store is the source of the Alcohol.