How to Use This Book

This book explains how to use 45 medicinal plants native to the southern Appalachians. Anyone who has spent time in the area may be familiar with many of the plants in this book, as the list includes some of the region's most famous wildflowers. I have deliberately left out several well-known medicinal plants, such as goldenseal and lady's-slipper, whose wild populations teeter on the brink of extinction. Until sufficient quantities are available from cultivated sources, these fragile native plants must be allowed to regenerate themselves in peace.

For easy reference, information about each plant is sorted by common name, botanical name, description, key medicinal action, and part of the plant used as a medicine. You'll also find information about the traditional and current uses of each plant, harvesting and therapeutic guidelines.

Please note that the information below about harvesting wild plants is intended only for personal use. If you are using native plants for commercial enterprises, in the Resources section you will find a list of reputable sources of organically grown and ethically harvested herbs.

Plant Names

The plants are organized by the common names most frequently used in the southern Appalachians. Common names are often colorful and descriptive but not always a reliable way to

accurately identify specific plants. To positively identify a plant, you must know its genus and species name. These names, based on the system of plant taxonomy, provide an international language for talking about particular plants.

A plant's family and botanical names describe its particular family, genus, and species. In some cases, only one genus and species are used medicinally, for example *Caulophyllum thalictroides*, or blue cohosh, is the only plant of that genus and species used medicinally. In other cases several or all species of a particular genus may be used. This is true in the case of the genus *Solidago* or goldenrod. With more than 30 species growing in the Appalachians, all are considered to have similar properties and have been used as medicines. When referring to goldenrod, it is common to see its botanical name written as *Solidago spp*. The abbreviation *spp*. indicating that more than one species is used.

The heading, Related Species, refers to other medicinal plants that are used similarly. Some related species are native to the Appalachians; others are naturalized; and many don't grow here at all unless they are cultivated in gardens. For example, the European species of gentian, *Gentiana lutea*, is widely used as a digestive bitter and is available commercially. The Appalachian species, *Gentiana clausa*, is used in exactly the same way, though it is not available on the herb market.

Even if botanical Latin is new to you, take the time to note the genus and species given for each plant (in italics) to be sure that you are collecting or buying the correct plant. To learn more about botanical names, plant families, etc., an excellent introduction can be found in *Botany in a Day* by Thomas Elpel. (See Bibliography.)

Botanical Descriptions

Scientific methods of teaching field botany ask us to switch off diffuse awareness of nature's kaleidoscope in favor of a one-pointed perspective that mentally dissects a living, breathing plant into precise botanical terms. For most of us, compartmentalizing is neither easy nor pleasurable but often necessary when driving on freeways and navigating through life in a city where our ability to relax must be overridden in the interest of survival.

In contrast, relaxing in wild places is a sensual feast: the feeling of sun warmed air on the skin and the soothing sounds of wind rustling through a thousand leaves painted every imaginable shade of green. Henry David Thoreau, a great observer of the natural world and one of my great inspirations, described the value of allowing nature to soften his awareness:

> *I must walk more with free senses…I must let my senses wander as my thoughts, my eyes see without looking…the more you look the less you will observe…Be not preoccupied with looking. Go not to the object; let it come to you…What I need is not to look at all, but a true sauntering of the eye.*[1]

Actively enlisting the senses in getting to know plants connects our modern consciousness with an ancient, time-honored way of learning. Experiencing a plant's texture, color, taste, and aroma creates a lasting impression of its many characteristics. Allowing the senses to lead the way, we begin to perceive patterns in nature that are not be revealed to us in any other way. One of the most powerful ways of "seeing" a medicinal plant is to close your eyes and touch the surface of a leaf, dig your fingers deep into the damp earth where the plant grows, feel the shape of a living root, take a leaf from the plant and chew it, and stretch out flat on

the ground beside the plant to enjoy a butterfly's eye view of the plant's perspective on the world.

The botanical descriptions in this book are designed to nudge you towards this way of knowing the plants by including information for all your senses. A glossary is provided to help you decode the botanical terms used in this book.

To see colored photos of each plant included here, you are invited to use as a reference *A Guide to Medicinal Plants and Herbs of Eastern and Central North America* by Stephen Foster and James A. Duke (New York: Houghton Mifflin Company, 2000). Beneath the botanical description of each plant, I have listed the page numbers of the plant's photo and description in the Foster and Duke text, i.e., MPH: pp. 301-302.

✦ Key Actions

Western culture's herbal tradition traces its roots to classic Greek texts on botanical medicine that classified plants according to their actions. Actions describe a plant's physiological effect. Describing a plant in terms of its actions is a kind of shorthand for talking about the medicinal properties of a plant. Knowing how to choose the best herb or how to create an herbal remedy that combines a variety of actions are skills that may take years to master. As you become more familiar with the medicinal characteristics of each plant become more familiar to you, it will be easier to choose plants based on their known actions. Actions are general guidelines; they're listed below in descending order of importance, even though many herbs have several actions that are equally important. For more information about the language of herbal actions, please refer to one of the general herb primers in the bibliography. The glossary contains definitions of key actions.

Part Used

Before harvesting or buying herbs, it's important to know exactly which part of the plant contains the healing action you need. Parts generally used are: the root, rhizome, leaf, flower, leaf with flower, flowering tops, bark, and the seeds or fruits.

Be aware that different parts of the same plant may have very different actions. For example, the leaf of the plant may be used to soothe skin irritation while the root of the same plant may induce vomiting. For most herbs, there is an official part used in modern herbal practice, and this is the part often sold commercially. Folk tradition may have relied on entirely different parts of the plant. Although any parts of a plant may have some medicinal actions, these other parts are often less potent than the official part. Some parts of a plant may have little or no medicinal value as medicines.

Traditional and Current Uses

A plant's historical use often reveals what its role may be in healing current health challenges. One hundred years ago in Western culture, the emphasis was on using herbs to manage infectious diseases like influenza and pneumonia. Many of today's health problems result from the long-term effects of stress and environmental toxins. The herbs now in demand are those that treat insomnia, depression, and immune system problems.

Fortunately, there is plenty of ethnobotanical documentation about how indigenous peoples used southern Appalachian medicinal plants and about the Europeans' discovery of many of the same plants. While cultural bias often skews the accuracy of this information, we can still discern familiar patterns that provide important information about these plants' essential character as medicines.

In more recent times, an extensive record of information on the traditional folk uses of herbs in the Appalachians comes from the work of Alabama herbalist A. L. Tommie Bass. Mr. Bass, who died in 1996, was a successful herbalist who used over 300 herbs in his practice. His use of medicinal herbs has been documented in several excellent books that were referenced in the writing of this book.

As modern translators of historical information, we have an opportunity to use herbs in new ways, thus making our own contribution to the living art of herbalism. Information about the plants' traditional and current uses is offered only as a starting point for your experience of the plants.

Harvesting

Information about when and how to harvest medicinal plants is an important part of the tradition that herbalists have handed down for generations, because knowing how to use plants that were harvested at the appropriate time is the basis of creating effective herbal medicines. The ideal time of harvest varies from plant to plant, because the medicinal compounds in plants change during various stages of the growth cycle. For example, a newly emerging leaf in early spring usually contains more active chemical compounds than later in the growing season after the plant has flowered and gone to seed. Careful observation is needed to track the growth cycle of plants through the seasons. In general, if a plant is harvested at the correct time and carefully processed, its medicinal actions remain very strong. Plants harvested before or after their peak make poor quality medicines.

Harvesting instructions are based on each plant's botanical characteristics. A bloom calendar is included to give you some idea of when the plant is harvested, but the appropriate harvesting

time may vary slightly from year to year and according to the weather in the region where the plant is growing. Proper harvesting instructions are included, such as "dig the entire root after the first frost" or "collect the leaves before the flowers appear." Various cultures use time-honored methods of determining when to harvest, such as the phases of the moon and other astrological and environmental signs. You may need a season or two of observing a plant before you get in sync with the rhythms of its growth cycle.

If you are new to wild plant identification, you may want to find an experienced herbalist or native plant enthusiast willing to assist you in learning how to identify plants. Basic botany books and field guides with identification keys are helpful, but it is often preferable to learn all the subtleties of plant identification in the field. See the Resources section for a list of schools and organizations that offer opportunities for field study.

Detailed instructions are given here about when to harvest each plant for peak medicinal potency. Before collecting any plants, be certain you know exactly what part of the plant is medicinal. This book contains information about how to harvest each plant without destroying it, unless of course it is the root that is collected. Even then, it is sometimes possible to replant a section of the root or rhizome, or ripe seed, so that the plant will regenerate itself. For more propagation information, please see the bibliography.

When preparing to go on a harvesting expedition, assemble and pack everything you'll need to store the plants after they are harvested. Pack labels and a pen, along with paper bags. As you harvest each plant, place each species in its own labeled bag; once plants wilt, they all look remarkably similar. Avoid using plastic bags, because plants stored in plastic quickly become mush. It is always a good idea to wear gloves when harvesting fresh plants. Frequent contact with fresh plants can cause skin irritation and other unpleasant symptoms.

Ethical Harvesting Methods

Large quantities of medicinal plants have been over-harvested from the southern Appalachians for hundreds of years. The number of plants in the forest today is a mere shadow of the abundance that once existed. Threats to the survival of wild plant populations have increased over the last 30 years due to the renewed interest in botanical medicines and the large-scale manufacture of herbal products. The surge in environmental destruction to the mountains has contributed to the state of emergency for wild plant populations.

Because many of the plants included here are only found in the wild—they will not grow outside their native habitat or are not being cultivated—it is critical that you only harvest plants from land you have studied carefully. Tim Blakely, one of my first herb teachers, advises everyone to observe wild plants in a particular place for at least one year before deciding to harvest them. Tim believes that until you're able to see whether a plant is part of a community of plants thriving from year to year, you can't be predict how your harvesting some of the plants will affect the well-being of all those that remain.

Several guidelines to follow when ethically harvesting wild plants:

- Do not harvest on private property without permission of the owner. You could be prosecuted for theft or trespassing. If you are interested in harvesting plants on private property, introduce yourself to the landowner and explain what you would like to do and why. Although they will probably think you are crazy to be collecting plants to use as medicine, if you reassure landowners that you will collect the plants without damaging their property, most are

willing to let you help yourself to their abundant supply of weeds.

- Do not collect plants from national or state parks or forests, recreation areas, wildlife management areas, nature preserves, etc. This land is held in the public trust, and removing plants is strictly prohibited and punishable by a fine. In some areas, permits are issued for collecting specific medicinal plants from public lands. Inquire at the local U. S. Forest Service or State Parks office for details.
- Do not collect plants from along roadways, railway lines, beneath electrical lines or from any other areas that are routinely sprayed with or exposed to toxic chemicals. Do not harvest any plant that you can see from a car, because it will have been regularly exposed to toxic gasoline fumes.
- Before harvesting any wild plants, verify their official conservation status by checking the plant's botanical name against lists published by various state and federal agencies or local conservation groups.

Several excellent conservation groups carefully monitor medicinal plant populations in the eastern United States and can provide helpful information. One recommended group is United Plant Savers, an organization dedicated to preserving and protecting native medicinal plants in North America.

If there is a native plant society or wildflower group in your area, it also may be a reliable source of native plant information. In addition, don't forget botanical gardens; they often sponsor symposia and lectures about regional plants. Many botanical gardens feature well-labeled collections of native plants and may

know of local conservation groups that sponsor plant rescues to remove native plants from land scheduled for development. Participating in plant rescues can be heartbreaking but is also a great way to relocate native plants to safeguard their survival. More information about these groups may be found in the Resources section.

Herbal Preparations

Making herbal medicines can be very satisfying. There is a wonderful sense of accomplishment that comes from looking at a cupboard in your home lined with jars full of dried herbs for teas, bottles of honey-rich cough syrup, potent tinctures and skin salves. For each plant included here, you will find ways to make herbal preparations that are based upon historical and current use. For the most part, medicine making requires a small investment in tools and supplies and yields a handsome return. For detailed instructions, see Chapter 2: The Simple Art of Making Herbal Medicines.

Treatment and Dosages

The information in this book is based upon the assumption that the reader has a basic understanding of herbalism. If you are new to working with plant medicines, before you use any of the plants described here, please see the bibliography for a list of excellent herbals that give detailed information about basic herbal therapeutics. See the Therapeutic Index for specific information on choosing herbs to treat individual symptoms and diseases.

Dosages given throughout this book are approximations based on my clinical experience and information I've gathered from

other experienced practitioners and herbal reference books. This information should be considered a general guideline for creating herbal therapies. Though this information is considered to be accurate, it should not be used as a substitute for advice from a trained health care practitioner.

Boneset

COMMON NAME: Boneset

BOTANICAL NAME: *Eupatorium perfoliatum*

FAMILY: *Asteraceae* (Daisy)

OTHER NAMES: Feverwort, ague weed, Indian sage

DESCRIPTION: Boneset is a symmetrical, erect herb, one to four feet tall, with a single stem ending in a slightly branched cluster of small, shaggy, white flowers. It blooms August to October. Boneset has distinctive opposing leaves that are slightly toothed and joined at the base so that the stem appears to puncture the leaves. The leaf has a rough texture and both the leaves and stem are covered with soft white hair.

MPH: p. 89.

HABITAT: Common in sunny open fields, at the edge of forests and along waterways.

KEY ACTIONS: Expectorant, diaphoretic, immune stimulant, antibiotic, digestive bitter, hepatic, analgesic, laxative, emetic

PART USED: Aerial (in flower)

TRADITIONAL USES: Boneset has a long history of use in both

European and American Indian herbal practice. The common name, "boneset," refers to its analgesic properties in treating fever symptoms. Patients given boneset reported that the herb seemed to relieve aching in the bones that accompanied many types of fever.

American Indians used boneset to treat respiratory infections, fevers, poor digestion, and rheumatic pains.

For hundreds of years, boneset was widely used in the treatment of influenza to relieve the body pains that accompanied high fevers. During the 1800s, boneset may have been one of the most frequently used household herbs in the eastern United States. Strong infusions were used to treat fever, colds, coughs, headache, and rheumatism. Boneset was also used as an emetic to remove mucus from the stomach. It was strongly promoted by Eclectic physicians as an immune stimulant and anti-inflammatory agent.

Herbalist Tommie Bass of Alabama used boneset in almost every liquid medicine he made. He claimed that many "old-timers" would make a strong, hot boneset infusion and soak their feet in it to "steam themselves."[8] Bass regularly used a cough syrup made with boneset and other herbs.

CURRENT USES: Boneset is one of the most useful herbs for the treatment of colds and influenza: it stimulates immune response; helps reduce fevers and eliminates excess respiratory congestion. As an analgesic, it has a profound effect on body aches and pains caused by fever or rheumatism.

In frequent, small doses, boneset is a digestive system tonic. It has an invigorating effect on the entire digestive process and relieves indigestion, gas, belching, bloating, chronic constipation, and lethargy after eating. It also will improve a poor appetite, especially in the sick and elderly.

HARVESTING: Harvest boneset in late summer just as the flow-

ers begin to bloom. Collect the entire plant from the ground up. If bugs have eaten the lower leaves, cut the stem just above damaged portions.

Boneset dries easily, even in humid weather. Bundle four or five stems together with a rubber band and hang the entire bunch to dry. To keep the herb clean while drying, put the bundled herbs in a paper bag, with the flower end down. Gather the bag around the base of the stems and secure with a second rubber band. The herb is completely dried when leaves crumble easily. Strip leaves and flowers from the stem. Crumble leaves and flowers into small pieces and store in glass jars. Discard the stems.

PREPARATIONS: Due to the bitterness of this herb, consider using it in syrup form. Whenever possible, prepare tinctures and syrups using fresh boneset herb.
TINCTURE: Fresh plant (leaf and flower) – 1:2. Menstruum - 50% alcohol. Dried herb – 1:5. Menstruum - 50% alcohol.
INFUSION: Use one and one-half teaspoon dried or one tablespoon fresh boneset for each cup of water. Steep for 15 minutes. Sweeten liberally with honey to counter the bitter taste.
SYRUP: Make an infusion using one ounce of dried boneset (leaf and flower) for every pint of water. Let infusion steep for eight hours or overnight. Strain out herb and return infusion to a pot with a lid. Bring to a boil; cover and simmer until volume is reduced by half. Combine one part concentrated infusion with one half part honey. Mix well. Store in a sterilized glass bottle in the refrigerator.

DOSAGES: Boneset is an intensely bitter herb. This is probably not a remedy to use with children or anyone who is not convinced of the benefits of herbal healing. When using boneset infusions to treat respiratory symptoms, add liberal amounts of honey to make the taste bearable. When using boneset as a digestive aid, do not

Boneset Syrup

Make an infusion using one ounce of dried boneset (leaf and flower) for every pint of water. Let infusion steep for eight hours or overnight. Strain out herb and return infusion to a pot with a lid. Bring to a boil; cover and simmer until volume is reduced by half. Combine one part concentrated infusion with one half part honey. Mix well. Store in a sterilized glass bottle in the refrigerator.

Take one to two teaspoons as needed to relieve coughs and soothe throat irritation. Boneset syrup may be added to hot tea.