Scientists have now developed Dutch Elm Disease-resistant hybrids, named Valley Forge, New Harmony, and Independence. These were cloned from resistant American Elms.

Slippery Elm
Ulmus fulva or *Ulmus rubra*

Plants rule! Without them, there would be no life as we know it on Earth. Plants are the only living things that produce oxygen, food, medicine, and untold numbers of other necessary products by eating dirt, air, sunlight, and water. Plants have no need for verbal communication, shoes, war, taxes, or short trips to the store. In many ways, I see them as a higher life-form. Self-sustaining, plants are environmentally safe and generate their own energy. Oh, what it must feel like to a tree as it is bathed in the first rays of morning's sunlight! "Plants," as Scooter Cheatham reminds us, "are the only organisms that make protoplasm, the very substance of all living cells from raw elements, the vital umbilical link that sustains all life."

One of my favorite plants is *Ulmas fulva,* commonly known as the Slippery Elm tree. It certainly demonstrates the sustaining nature of the plant kingdom. This amazing tree is on the top of my "ten most useful plants" list because I have seen it help so many. But unfortunately, it is in decline in much of its native habitat. Where I live, in the fertile foothills of the Appalachian Range, this is sadly evident. The culprit is a fungus,

Graphium ulmi, commonly known as Dutch Elm Tree Disease. The carrier, the Elm Bark Beetle, arrived on North American shores in a boatload of logs from the Netherlands around 1930. Dutch Elm disease has affected not only Slippery Elm, but most other native Elms as well. Urbanization, logging practices, and mining also contribute to the ever-decreasing numbers of this remarkable giving tree. The imported Siberian Elm has not yet succumbed to Dutch Elm Tree Disease.

Slippery Elm prefers rich soil and substantial rainfall, and can attain a height of 60 feet with a trunk diameter of up to 2 feet. The inner bark of the tree has long been valued for food and medicine, but given the increasingly at-risk nature of the species, its branches are used instead of the main trunk's inner bark. On the farm, I have found that I can use the inner bark of trees that have contracted the disease and will be dead in a year or so. The inner bark is mucilaginous with a sweet, earthly fragrance and flavor.

Slippery Elm flowers in the first delicious warmth of late March or early April, before its leaves appear. The greenish-brown seeds, larger than those of its sister tree the American Elm, also appear before the leaves. The larger leaf buds are visible through the plant dormancy, and are downy with red hairs. Both Slippery Elm and American Elm are dominant succession species, moving quickly into old pastures and hay fields along with Sassafras and Black Locust. Strong and beautifully grained, the wood of Slippery Elm is hard and reddish in color. I've been told by old-time woodsmen who grew up in this area that it is suitable for outdoor use.

In forest surrounding my farm, I am fortunate to still have some larger, older Slippery Elms that have not succumbed to the Dutch Elm Tree Blight. I fear this may be a short-lived situation and that these trees may go the same route as the American Elm. For many years it seemed that Slippery Elm was resistant to the blight and that only the American Elm would succumb. However, in the past ten years this has proven false, as more and more of the Slippery Elms are showing signs of the disease.

(This article was written over ten years ago and even in this short time, 20-25% of the existing population of Slippery Elm around my farm has died.)

Virtually all of the older American Elms in the area have died. There remain a few young trees, but they are decreasing in number rapidly. The Elms seem to get the disease at about fifteen years old, then die off in a two-year period, but I have seen younger trees affected with the disease as well. In the last several years, I have seen healthy trees turn brown and defoliate in midsummer, and die within a month. There seem to be other disease at work here now. I hope that people understand that this is an important species to plant to help ensure its survival. Every year I gather Slippery Elm seed and send it to my dear friend, great plantsman and herbalist Richo Czech. That seed can be bought from his company, Horizon Herbs, in Williams, Oregon.

Historical Background and Medicinal Uses

Slippery Elm is one of the most versatile plants in the herbal kingdom. An important tree of plenty, it is renowned for its beauty, medicine, and food; it seems to help everything it touches. Its herbal actions are demulcent, expectorant, emollient, diuretic, and nutritive in nature, and very safe for any use.

Slippery Elm has a long history of use as an herbal medicine; it is still listed as an official drug in the United States Pharmacopoeia and is also sanctioned as an over-the-counter drug. It is one of nature's best demulcents, its effectiveness proven through long use. It contains mucilage cells, starch, tannin, and calcium oxalate. These constituents penetrate and cover exposed and irritated surfaces, aiding in the healing process. Having emollient action, it tends to soften and relax inflamed tissues and is specified for inflamed conditions of mucus membranes of the bowels, stomach, throat, and kidneys. Its mucilage was employed by the Thomsonians during labor as a lubricant for midwives' hands. (Thompsonians are followers of a system of herbal medicine practiced by Doctor Samuel Thompson in the early 1900's.) Thomsonians also used Slippery Elm in combination with *Lobelia inflata* mixed with small amounts of soft soap to bring boils and abscesses to a head so they could be more easily lanced and drained. Slippery Elm also formed an important ingredient in an original Ojibwa treatment for cancer, now known as the Essiac formula, that is still widely

used. It is reported that during the Revolutionary War, surgeons used the inner bark of Slippery Elm as a source for quick energy, and in 1776 soldiers who had lost their way in the frigid winter survived for twelve days on a jelly prepared with Slippery Elm and Sassafras. In times of starvation and hard winters, many native and pioneer peoples stayed alive by using the inner bark of this amazing tree as a food source.

Clearly, Slippery Elm is a tree of many uses. Its inner bark is excellent when prepared as a tea. In this form it can be used as an enema and as a vaginal douche for irritated membranes. The tea is also an effective wash for chapped hands and face. It's been used as a suppository by mixing the powdered bark with warm water and forming pieces about ½ inch thick by 1 inch long. The powder mixed with water makes an excellent poultice for wounds, burns, boils, and ulcers. The inner bark ground into a powder and prepared like a cereal with milk or water is recommended for an ulcerated stomach, general weakness, those recovering from illness, bleeding lungs, and bronchitis. Because of its mucilaginous nature, Slippery Elm's properties are readily available during the digestive process. Easily digested, it has as much nutrition as oatmeal, and is an excellent food source for infants and children with digestive disturbances. It is also a mild and painless laxative for children, with action so gentle it can be retained by the most sensitive stomach when no other food or medicine is tolerated. If desired, it may be flavored with cinnamon, nutmeg, or honey.

Slippery Elm is a superior medicine for sore throats and coughs. For the greatest effect, chewing on the soft inner bark while swallowing the mucilage is recommended. This is very helpful for a dry, non-productive cough.

Watching squirrels on spring walks, I learned to collect the young seeds and found them to be edible and delicious. Though this information is not available in any herbal guides I have read, I have experienced these tasty seeds to be perfectly palatable and safe. In recent herb classes, we sliced and braided the inner bark and made ropes, necklaces, and bracelets. They proved to be strong, but of course became slimy when wet. Perhaps a portable, self-worn combination skin care and respiratory tonic?

In conversation with David Winston, a well-known New Jersey herbalist, I confirmed my hunch that Slippery Elm was commonly used in non-medicinal ways by our First Nation People, who removed the mucilage and beat the fibers, then wove them into a rope, clothing, or covering.

Preparations and Dosage

There are many ways to prepare Slippery Elm bark; a few have already been mentioned. Some of the most common methods are listed here.

Tea

The general formula is one-half ounce of bark steeped in 1 quart of simmering water for 1 hour or longer. Strained and used freely, is good for both ingested teas and enemas. More of the herb can be used if desired.

Capsules

Finely powdered bark maybe encapsulated in gelatin or vegetable capsules. General recommendation is to take two capsules three times daily.

Poultice

To make a poultice, add warm water to the powder and make a thick, viscous paste. May be applied to wounds, burns, and boils to sooth and heal.

Nutritive Gruel

To make a nourishing gruel, bring one cup of milk, or coconut milk, to a simmer. Add 1 ½ teaspoons of powdered Slippery Elm and 1 teaspoon of honey to the milk and stir until it reaches the boiling point. Remove from the heat. Stir the gruel a few seconds more, adding a pinch of cinnamon powder if desired. This is delicious and very good for young children.

Elm Ooze

Whole pieces of bark may be simmered

in a little water until a thick, gelatinous slime is produced. When cooled, this healing ooze may be used for raw, chapped skin and wounds.

Propogation and Cultivation

Given the current status of the Elm population in general, along with the incredible usefulness of Slippery Elm, it is imperative that we begin planting this tree as part of our sustainable farm and garden practices, much as we plant Comfrey and Jerusalem Artichokes. Though Slippery Elm is now very susceptible to Dutch Elm Disease, it seems to remain healthy for ten or fifteen years before contracting this disease. Thick young stands of trees, like I found when I first moved to my farm, can be thinned and used as medicine. Larger trees that have been infected by the disease will not recover and are good to harvest for medicine, building material, and firewood for a couple of years. Never harvest the inner bark from a healthy trunk, as this will allow access for disease. You may prune a few lower limbs to gather your medicine and not injure the tree. Spring is the best time to harvest the inner bark of the Slippery Elm tree.

Slippery Elm plantings should not only be considered for aesthetics and for food and medicine, but also as a source of seed stock to ensure the future survival of this most giving tree. Slippery Elm seeds may be sewn in their normal cycle in the spring of the year, in 18 inch raised peat moss, soil, and sand beds. The beds may need wire tops for protection of the young seeds and seedlings. You may expect some light germination that summer and a greater germination the following spring. Expect a 10-30% germination rate. Transplant the tree into tree tubes within the first month of germination (this soil should be a well-drained potting soil). They may be field planted after a year or two, depending on the size of your chosen tree tube. Always keep the tree watered during drought, and routinely check for insect predation and signs of fertilization needs.

At this juncture, I don't have enough information regarding how Slippery Elm is faring in other bio-regions. This information is necessary and will be useful in understanding the progression of Dutch Elm Disease. Slip-

pery Elm is now susceptible to other diseases like Elm Phloem Necrosis, which is now in our bio-region. I am seeing healthy-looking Elm trees never recover and die by midsummer. Please pass any reports on to me at:

United Plant Savers Botanical Sanctuary
Attention: Paul Strauss
35703 Loop Road
Rutland, OH 45775

Harvesting

When possible, Slippery Elm should be harvested in the spring, when it is at its greatest potency. Make sure you have positively identified the correct species before harvesting. Many trees have a soft inner bark, but only Slippery Elm is so full of rich mucilage.

Always be conscious of the plant's energy, especially when harvesting material for medicine. Thanking the plant, or making an offering, keeps this process clear and open, thus recognizing the unseen reality that affects our existence so deeply. We as humans must recognize the value and energy of other life forms as much as our own. The proverb "do unto other as you would have others do unto you" should include the green world as well, and is most appropriate when harvesting medicine. These plants don't need us, we need them. Harvest only when there is an abundance of plant material. Never gather from roadsides, or polluted areas. Unless harvesting from an area being cleared for a road, building, or pond site, never girdle or strip the tree, as this will cause a sure death.

When gathering the inner bark of trees, harvest only from the branches, not the main trunk. In this way you will minimize damage to the tree. The preferred tool for gathering the inner bark is a draw knife, but a sharp pocket or kitchen knife will suffice for smaller amounts. To harvest, scrape away the outer bark, exposing the medicinal inner bark. Harvest it in 3-5 inch strips by angling the blade against the hard inner tissue and stoking downward. This is the same process used for gathering the inner bark of most medicinal trees, such as White Oak.

UpS Recommendations

Limit wild harvest to trees struck by natural disasters such as storms; otherwise use cultivated resources only. Possible substitutes include Marshmallow, Comfrey, and Mullien.

*This article originally appeared in *Planting the Future—Saving Our Medicinal Herbs,* edited by Rosemary Gladstar and Pamela Hirsch, and published by Healing Art Press, Rochester, VT. This is an important book for those interested in our disappearing medicinal herbs and how you can help sustain them.