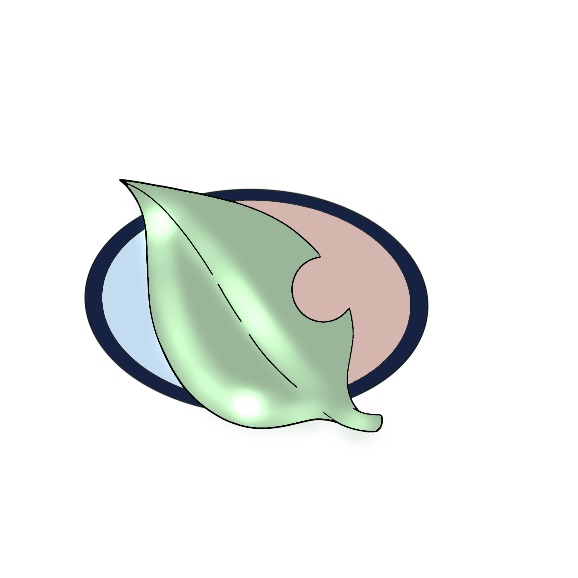
**MODULE FIVE**

**Grow Your Own Herbs**

To the Instructor:

*This module is designed to allow students hands-on experiential knowledge through preparing, planting, nurturing, growing, and harvesting their own herbs. Supervision will be necessary when preparing the ground for planting. All planting and growing instructions are for organic (non chemical) growth of herbs.*

Materials Needed:

Plastic seed tray

Seed starter soil

Popsicle sticks

Water

Permanent marker

4-4x4s cut to 12 inches (these will be the corner posts)

8-2x6s cut to 4 feet long (these will be the sides)

4- 2x2s cut to 2 feet long (center posts)

Tools: screwdriver, drill, hammer, tape measure\

6 bags of garden soil

Seeds or seedlings

Optional: weedblocker material, sprinkler

Did you know that it is very, very easy to grow your own herbs in your backyard? It is! Many plants, like herbs, are very simple to grow, and as long as you are kind to them and give them the things that they need to be happy, they will grow into grownup plants that give us help when we are sick, make our foods taste delicious, and help keep pests away from our bodies and our homes.

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In the last module we talked about a dozen different herbs that are particularly useful and helpful to people. In this module, we are going to learn how to grow some of those herbs, and some new herbs that you may not have met yet. All of these herbs are good for using around the home in various ways. Growing herbs, and other plants too, in your backyard means that you get to decide what you want to grow. The food grown in backyards is far superior to foods grown on large commercial farms, because in backyards you don’t have to rely on toxic pesticides to control the bugs, treat diseases, or get your plants to grow. The earth literally gives you everything you need in order to help your plant buddies to grow and thrive. And, in return, they share all that they are with all that you are.



In this module, you will be offered a chance to build and create a sanctuary for your plants to grow, as well as a place where you can come to be with them and watch them grow. Many studies have been done to date, which indicate that the very microbes in the soil produce a ‘happy’ effect. In other words, the elements in the dirt stimulate our brains to produce naturally occurring chemicals (serotonin) that make us feel happy and at peace. Learning to grow your own herbs, and your own vegetables, too, mean that no matter where you find yourself in the world when you are grown, you will always know how to feed yourself, and live a healthy life.

**A Seed Nursery**

One of the best ways to give your baby plants an early start is to create a plant nursery. Staring the seeds ahead of the planting season gives you a head start on growing them. Grow them indoors in a flat tray, and then when the weather is right, take them outdoors to plant. Many herbs are very tough little plants and they can stand up to a lot of very difficult growing conditions. Still, you’ll want to give these baby plants the best of all possible starts, right? Here’s how to start your own seed nursery and start growing your own herbs.

**Step One: Select Your Seeds**

First, you’ll want to decide which herbs to grow. The following are recommended for beginners as they sprout quickly and they do well once transplanted into the larger garden.

Mint

Chamomile

Lemongrass

Aloe Vera

Rosemary

Lavender

Garlic

Lemon Balm

Echinacea

Calendula

**Step Two: Play with Dirt**

The dirt, or soil, is very important to the baby plants. It needs to be soft like a blanket in a baby’s crib, or the seeds will have to work harder to push through the soil to the surface. Select a type of soil that is made for starting seeds. This type of soil will have the vitamins and minerals that they will need. There are many very good organic seed starting soils at most garden centers.

Place this soil into the seed starting trays. These trays look like very long rectangles and have small compartments in it. Moisten the soil using a spray bottle, misting the soil slightly, or just a little bit of water into a bucket filled with the dirt (then get your hands in there and mix it up).

**Step Three: Read the Directions on the Seed Packets**

Most seeds have a certain depth into the soil where they like to be planted. Some plants like to sit almost at the surface, so that the sun and the light can help them grow, while others like to nestle deep into the rich soil. Plant at least two seeds to each compartment, since sometimes (and no one really knows why) some might not sprout. Take your popsicle stick and write the name of the plant on it. Stick this at the end of the row where you plant your seeds so you can watch and see which type of seed comes up first.

**Step Four: Cover with Plastic**

To speed up the process of germination (which is when the seeds sprout) cover the tray loosely with enough plastic wrap (like many people use for covering up left over food) to cover the entire tray. This traps in the moisture and makes a miniature greenhouse effect for the plants. Some trays come with a plastic lid. If so, place this over the plants instead, instead of using the plastic wrap.

**Step Five: Pay Attention**

Just like human babies, plant babies need to be watched. They need to be checked to see if they are sprouting yet. When most of them have poked through the ground, it is time to remove the plastic covering and place them somewhere that there is a bit of sunlight (or if it is still in the winter you might want to use a grow light). Record what you are seeing in your field journal. Are there some seeds that sprouted faster than others? What do they look like? Be sure to mist them lightly every day or so to keep them growing and happy. Once they are several inches tall and have 5-6 good leaves on them, they are ready to go out into the great outdoors. But first, they have to have a place to go!

**Raised Bed Gardening**

Raised bed gardening has fast outpaced traditional gardens in many areas around the world. It offers an enjoyable pastime for those with stressful careers, allows for the aging to still enjoy gardening, is easily accessible for young children, takes up less space in a smaller area, and, if treated properly, is less maintenance than a traditional garden. Making one is not a big deal, and for the price of a few good materials, the entire project can be done in less than a few hours. Create multiple raised beds and have all of it done in a days’ time.

**Step One: Choose the Best Place**

If you have a lot of space, that’s great, but if not, raised beds can be placed in a great deal many locations. The first thing you’ll want to keep in mind, though, is that the average raised bed is four feet by four feet (a square), so you’ll want to have at least that much room.

Next, you’ll want to make sure that the place you’ve selected gets enough sunlight and isn’t in a place where the water likes to sit in a big puddle all day long. Plants don’t like to have their feet wet (unless they are water plants). The area also is best if it is level.

**Step Two: Build the Bed**

Materials needed:

4 Posts-4x4s Cut these into one foot sections

8 Side panels-2x6s Cut these to four feet long.

4 center posts- 2x2s Cut these to two feet in length.

1. Take all of the pieces out to the location you’ve selected and start putting them together. Put the 4x4 pieces where you want your four corners to be, then screw in a 2x6 side panel to one of those posts. Make sure to leave at least four inches at the bottom of each post. Do the same thing on the other side. Attach the second side panel on top of the first one, so that there should be two 2x6 boards connected to the corner posts. Do the same thing for the other side.

2. Stand one of the completed sides upright, posts to the outside, then attach the side rails so that the end is completed. Repeat this on the other end. It will most likely be a little flimsy, but once you’ve sunk it into the ground it will be very sturdy.

3. Take the 2x2 center posts and pound them down in the middle of the side rails. This gives it some strength. Then, dig holes for the four corner posts, and sink those posts down into the holes. Fill in with dirt and stomp on it to get it in there good and tight. Make any adjustments you might need to in order to make it level.

**Step Three: Dirt**

If you are going to use weedblocker material, cut it to the right size and stick that on the bottom of the bed (on the inside). This cuts down on weeds, but it also keeps several very destructive creatures from hurting your baby plants. Then, place your very good soil down on top of the weed blanket. Sometimes gardeners add in compost or peat, which are special types of dirt that help to hold in the water when it rains.

**Step Four: Plant Your Babies**

Plant your babies in the late afternoon or early evening. This keeps the hot sun off of them while they settle into their new homes. Make sure that you transfer your popsicle sticks so you can continue to keep track of your baby plants as they grow into bigger and bigger plants.

**10 Herbal Powerhouse Plants: Try growing them all!**

**Mint**

Mint plants are very easy to grow herbs that have a toothy leaf, and fragrant purple flowers. The stem is square and it will grow into a small compact bush.

**Chamomile**

This is a daisy like plant that produces beautiful flowers all summer long. They will come up year after year once you’ve planted them.

**Lemongrass**

Lemongrass is best started as a small seedling or cutting purchased from someone. It has long grasslike leaves and they smell like sweet lemons.

**Aloe Vera**

Aloe Vera has long spiky ‘arms’. They don’t grow well from seeds, but grow like crazy from cuttings a friend has given you, or from a small plant purchased at the store.

**Rosemary**

Many gardeners have rosemary plants that are, literally, decades old. These plants, once they start growing, can become very large bushes. These bushes have long tendrils whose leaves are small and long, like fingers.

**Lavender**

Lavender plants are sweet and fragrant, with small oval leaves and purple flowers. Bees love them!

**Garlic**

Garlic has long pungent spikey stalks that emerge out of the ground. The actual garlic bulb develops underground.

**Lemon Balm**

Bees love lemon balm. This looks a lot like the mint plant and has leaves that are shaped similarly to its minty cousin. Lemon balm, like its name, smells like lemons.

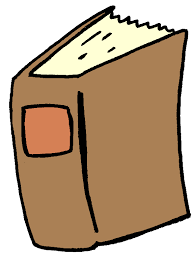
**Echinacea**

Echinacea is a beautiful flower, just on its own. It offers the additional bonus of being a herbal powerhouse. The purple, pink, or yellow flower is on a very long and elegant stem.

**Calendula**

This is a beautiful daisy like flower, too. When it is a fully grown plant, it grows in a clump with many of its own babies.

**Field Guide**



List all of the seeds that you have selected in your field guide and record the activity each week. Does one type of seed grow faster than the others? Who is the slowest?

Plants tend to grow towards the sun. Are any of your seedlings bending toward the light? Growing your own herbs is a very good way to learn about how plants get their start, and to become a part of that plant’s life history. Caring for plants, like caring for the planet, doesn’t take a lot of time or effort; it takes caring and understanding.

As your plant babies grow, place a sketch of them into your field journal (like a baby’s photo album). Some gardeners name their plants. What would you name yours? These plants when they are grown, will offer you and your family untold riches by way of medicines, flavorings, and beauty in the garden.

These are only a few select herbs that we’ve suggested to you to grow. There are so many more out there. Experiment with different types of herbs, and make sure to completely study and understand them before planting them or buying a seedling. You and your plants will be happier for a little planning ahead of time.



**Seeds for Thought**

The baby plants that grow will need to be cared for. As much as nature provides for her plants to know how to grow up through the warm embrace of the soil, the new life that emerges will need your help to make sure they have everything they need in order to survive. This type of caring is called ‘empathy’. It means you are able to think and care about someone or something that isn’t you. Think of each little plant that is growing in your garden. You helped to make that life possible, and those plants now depend on you. You are a part of their life’s history. Pretty cool, isn’t it? Take a moment, when you are out in your garden to speak to your little plant babies. Scientific studies actually prove that speaking to your plants DOES make them grow better.

Standards Presented in this Module

* Follow precisely a multistep procedure when carrying out procedures, taking measurements, or performing technical tasks.
* Translate quantitative or technical information expressed in words in a text into visual form (e.g., a table or chart) and translate information expressed visually or mathematically (e.g., in an equation) into words.
* Botanical terms, scientific terminology.
* Analyze the specific results based on observation.
* Synthesize information from a range of sources (e.g., texts, experiments, simulations) into a coherent understanding of a process, phenomenon, or concept, resolving conflicting information when possible.