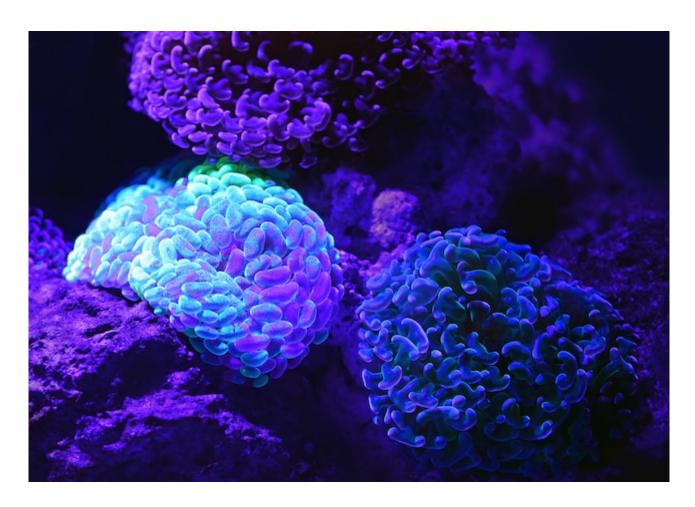
## The Gardener's Brain



As you stand amidst the lush, vibrant foliage of a garden, your busy mind settles into the soothing rhythm of the natural world. The rumination stops. You notice the gentle rustling of leaves, the cheerful chorus of birdsong, and the earthy aroma of freshly turned soil. It's in these still moments that you realize there's something profoundly transformative happening inside your mind. This is a phenomenon that we might refer to as "the gardener's brain."

### What Is The Gardener's Brain?

"The gardener's brain" is more than just a pretty metaphor. It's actually related to the science of how gardening impacts the brain. Research has uncovered that activities as seemingly simple as digging, planting, and weeding trigger a cascade of neural responses within the brain.

When gardeners immerse themselves in these tasks, their bodies release a surge of endorphins. These are the body's natural mood elevators, promoting feelings of happiness and wellbeing. This natural release of endorphins not only enhances mood. It also acts as a potent pain reliever, reducing the perception of discomfort and stress. The gardener's brain, it appears, is itself a garden of sorts — a garden of neurochemical delights.

## **Neurology and Gardening**

Gardening engages various neurological aspects that contribute to its positive impact on mental well-being. Here are some key neurological aspects of gardening:

### **Endorphin Release**

Gardening activities like digging, planting, and weeding stimulate the release of endorphins, which are natural chemicals produced by the brain that help reduce pain and induce feelings of pleasure and relaxation.

### **Dopamine Production**

Engaging in gardening can lead to the release of dopamine, a neurotransmitter associated with pleasure and reward. This can result in a sense of accomplishment and satisfaction when seeing plants thrive.

### **Stress Reduction**

Gardening has been shown to lower cortisol levels, a stress hormone, leading to reduced feelings of anxiety and stress. This reduction in stress hormones can have a calming effect on the brain.

### **Improved Mood**

Spending time in nature and tending to plants can elevate mood by increasing the production of serotonin, a neurotransmitter linked to feelings of happiness and well-being.

### **Enhanced Cognitive Function**

Gardening involves planning, problem-solving, and attention to detail, which can stimulate cognitive function and help maintain mental sharpness, especially in older adults.

### **Sensory Stimulation**

Gardening engages multiple senses, including touch, smell, sight, and sometimes taste. This sensory stimulation activates different parts of the brain, providing a holistic cognitive experience.

#### Mindfulness and Meditation

Gardening often encourages mindfulness, promoting a state of focused attention on the present moment. This practice can have a positive impact on the brain's neural pathways associated with stress regulation and emotional control.

### **Neuroplasticity**

Engaging in new gardening tasks and challenges can promote neuroplasticity, the brain's ability to adapt and rewire itself. This adaptability is crucial for learning and memory.

### **Social Connection**

Gardening in a community or with others can activate areas of the brain associated with social bonding and cooperation, fostering a sense of belonging and connection.

### **Positive Associations**

Over time, the brain forms positive associations with the act of gardening, making it a source of pleasure and relaxation, which can lead to long-term mental health benefits.

## The Brain Benefits of Digging, Planting and Weeding

Let's take a bit of a closer look at how each of these three stages of gardening affect the gardener's brain in relation to the above.

## The Brain Benefits of Digging

Digging, a fundamental gardening activity, offers numerous brain benefits. As the gardener plunges their hands into the soil and wields a spade, the brain's reward system springs into action, releasing dopamine—a neurotransmitter associated with pleasure and motivation. This surge of dopamine not only fosters a sense of accomplishment but also reinforces the satisfaction of physically shaping the earth. Additionally, the rhythmic, repetitive nature of digging can induce a meditative state, reducing stress and anxiety while enhancing concentration. This combination of pleasurable stimulation, meditative engagement, and tangible outcomes makes digging a cognitive workout for the brain, improving mood and mental well-being.

## The Brain Benefits of Planting

Planting seeds or young plants is a gardening endeavor that brings unique neurological advantages. When gardeners delicately position a seedling into the ground or gently nestle seeds into the soil, they engage fine motor skills and tactile senses, activating areas of the brain associated with touch and spatial awareness. The act of planting also instills a sense of hope and anticipation—a future harvest or a flourishing flowerbed—triggering the release of dopamine, which elevates mood and motivation. Furthermore, the nurturing aspect of planting fosters a deep emotional connection with the growing life, offering a source of ongoing satisfaction and a sense of responsibility. This emotional bond contributes

to a sense of purpose, enhancing overall mental well-being.

### The Brain Benefits of Weeding

Weeding, often perceived as a mundane chore, conceals surprising neurological benefits. As gardeners meticulously remove unwanted plants or invasive weeds, they engage in an activity that demands focus and attention to detail. This heightened concentration can lead to a state of mindfulness, where the brain is fully immersed in the task at hand, relieving stress and promoting relaxation. Moreover, the act of weeding provides a tangible sense of progress and control over one's environment, which can boost self-esteem and reduce feelings of powerlessness. In essence, weeding transforms a seemingly routine task into a therapeutic exercise for the brain, offering mental clarity and emotional satisfaction amidst the garden's green tapestry.

## Notice Your Changing Gardener's Brain

Since you started gardening, you might have noticed some amazing changes in your brain. You might feel happier and more relaxed when you're in your garden, thanks to all the fresh air and natural beauty around you. You might also find that you're better at focusing and solving problems now, probably because gardening makes you pay close attention to what you're doing. Plus, you've learned to be patient and persistent, just like your plants, which has made you more resilient in other parts of your life. Remember this each time that you head out to the garden. Celebrate all that this hobby does for you.

### Read More:

- The Best Plants for Mental Health Benefits
- Being a Beginner In the Garden
- 13 Gardening Books on My To Be Read Shelf

# Being a Beginner in the Garden



I've admitted to you in the past that I honestly have a bit of a brown thumb. During periods of depression, this can make me feel like I will never be able to grow a plant ever again. However, most of the time, I'm able to turn off that kind of thinking. I'm able to embrace the beauty of being a beginner at something. It's okay to be a beginner. And it's okay to always be an amateur at something. In fact, I think it can be a really beautiful thing.

## Being a Beginner Is Hard For Me

It's taken me a long time to learn how to NOT be good at things. Obviously, I don't mean that I'm naturally good at

everything I try. Far from it. However, historically, I give up really easily at things I'm not immediately good at. School was always easy for me, so I pushed forward in that and excelled. Flute lessons and athletics were hard for me; I quit or didn't even begin.

## Learning How to Learn

Over time (I'm in my forties now!), I've learned how to embrace being a beginner. It started in school. It took me a really long time to comprehend the idea that school was a place for me to learn things, not to be automatically good at them. Since I had fit so well into traditional school growing up, it all came easily to me. I never realized I was there to learn hard things. Honestly, I didn't learn a whole lot from my Bachelors' degree either. I did the work, got the grades, moved on.

However, grad school was hard. I got my MA in Psychology. The school work wasn't hard at all. The papers and tests came easily to me. However, the actual experience of pushing myself and learning and growing and being part of a complex group dynamic was really, really hard for me. And I did it. And I'm prouder of that than of any grade I ever got.

## The Beauty of Being a Beginner

I've finally learned about how great it is to NOT know something but to want to learn it. I've learned that it's not only normal and okay to mistakes; it's great. Here are some of the reasons that it's beautiful to be a beginner, in gardening or any other pursuit:

- The pressure is off. You don't have to do this perfectly because YOU DON'T EVEN KNOW HOW YET.
- The excitement is high. There is so much ahead to learn!
- You don't have preconceived notions. Or you do but you

can let them go. Thus, you're more present in the experience.

- Hope, possibility, openness, curiosity ... these are all things that it's possible to bring to the garden as a beginner. And you can bring this beginner's mind to the garden even if you've been gardening for a really long time.
- The rewards feel huge! I feel good when I complete something I'm good at, of course. But I feel amazing when I succeed at something I'm not good at, yet!

So, I think it's wonderful to be a beginner in the garden. I think it's wonderful to stay an amateur. After all, I don't plan to do any professional gardening. Therefore, I'll never have to worry about striving for perfection, layering business over the hobby, etc. I have other things for that. A garden can just be a place to play.

What are your thoughts on being a beginner? Is it hard for you? Easy and exciting? Both?

#### Read More:

- Quotes About the Benefits Of Gardening
- Pine Street Garden, San Francisco
- Could I Make Money With Worm Farming?