Double Your Vegetables in Half the Garden Space

5 KEYS to a Successful Vegetable Garden

BY: STACEY MURPHY

When growing conditions are ideal, vegetables and herbs seem to grow all on their own. Your garden will be the envy of the neighborhood!

If you want gardening to be easy and your garden abundant, it's truly about working WITH nature, creating an eco-system made for your plants to thrive.

The difference one foot can make on your vegetable harvest...

There is this tree in my garden that keeps getting bigger and stealing a little more sunshine each year. So, I experimented:

I grew cabbage under the tree. Half the plants were in FULL sun (6+ sunlight hours each day) and half were in the DAPPLED SHADE of the tree (4 hours of sunlight each day).

Fast forward 60 days: Cabbage in the FULL sun was ready for harvest, just like the seed package said it would be. Each cabbage head was 2-3 pounds. The cabbage in the DAPPLED SHADE looked pretty sad.

After ANOTHER 60 days (120 days total after I planted): the rest of the cabbage was ready. Each of the heads grown in the shade was significantly smaller, about ¾ of a pound!

The final harvest numbers: I grew 16 pounds of cabbage in the FULL sun and only 4.5 pounds of cabbage in the shade. Depending on how you run the math, that's nearly quadruple the yield in the sun -OR- nearly double the yield in half the space.

And those plants in the shade were just ONE FOOT OVER!
Sunlight is a KEY to your garden abundance.

Evaluate how well your growing space will produce food with the checklist in this book:

5 Keys to a Successful Vegetable Garden Space

Vegetable and herbs will still grow even if conditions are not IDEAL, but expect your harvest to be a little smaller and slower.

And at the end, I'll show you a couple ways you can bend the growing conditions more in your favor ;)

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1st Key

6-8 Hours of Sunlight or MORE

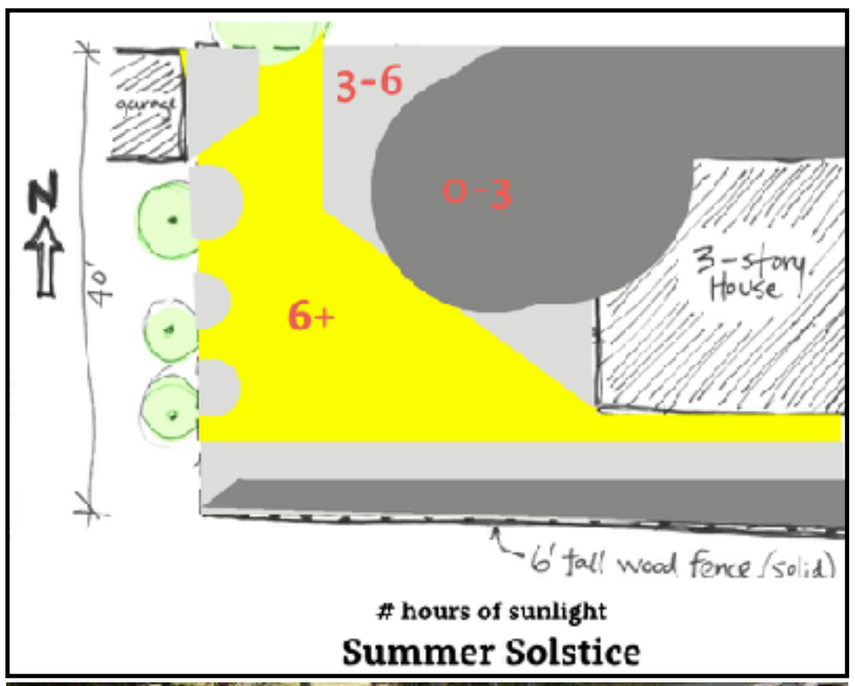
It's not enough that a growing space "seems" sunny. To produce significant amounts of vegetables, your plants need at least 6 hours of sunlight each day and would love MORE.

SUNLIGHT + carbon dioxide = vegetables (Definition of photosynthesis)

If a plant doesn't see the sun, it can't photosynthesize. Which means it won't grow.

If you get less than 6 hours of sunlight each day, you are working AGAINST nature. Observe and draw how many hours of sunlight your growing space receives. (see page 9 for instructions)

You already read how growing in the shade takes longer and yields smaller plants. So find that sunlight! You may have to get creative with grow lamps, reflectors, unless you move to Alaska where they get 18 hours of sunlight each day!



hours of sunlight
Summer Solstice

Cabbage in Alaska!

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2nd Key

50-85°F (10-29°C) nighttime for peak growth

Every vegetable and herb has a temperature sweet spot, where the plant LOVES to grow. You'll find yourself saying, "I'm not doing anything, and I swear that plant doubled size overnight"

Most vegetables & herbs THRIVE when nighttime air temperatures stay between 50-85°F (10-29°C)

Notice when your local temperatures are in this ideal range. If temperatures drop a couple times below 50° F at night or you have a couple 95° F days, your vegetable crops will be fine.

However, if crops are regularly experiencing nighttime temperatures outside the 50-85° F range, you may want to add a warming blanket (like plastic) or a cooling blanket (like shade cloth).

There are dozens of other methods that you can use to defy your local temperatures and extend your growing season. It is helpful to choose crops and varieties suited for your local growing conditions.

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3rd Key

Dedicated space to grow vegetables

Growing vegetables and herbs in a small dedicated space will conserve your time and resources. Focus on building strong biology.

Healthy plants start with healthy roots, so cultivate local biology

If you want nutrient-rich vegetables and herbs, you want healthy roots teaming with biology.

Whether you're growing in soil, containers, or water-based solutions, it is the micro-organisms who feed precious nutrients to our plants so our plants can pass those nutrients on to us.

So mark off your garden area and treat it like gold.

Raised planting beds work well with or without lumber. When growing in-ground, mark off the area with string so nobody steps on your precious garden soil.

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4th Key

In your line of sight (daily or weekly)

Starting a garden is like adding a pet to your family. If you don't change your habits to include your garden on a daily basis, you will neglect your plants and they might die.

You don't need to DO much: the best fertilizer is a gardener's gaze...

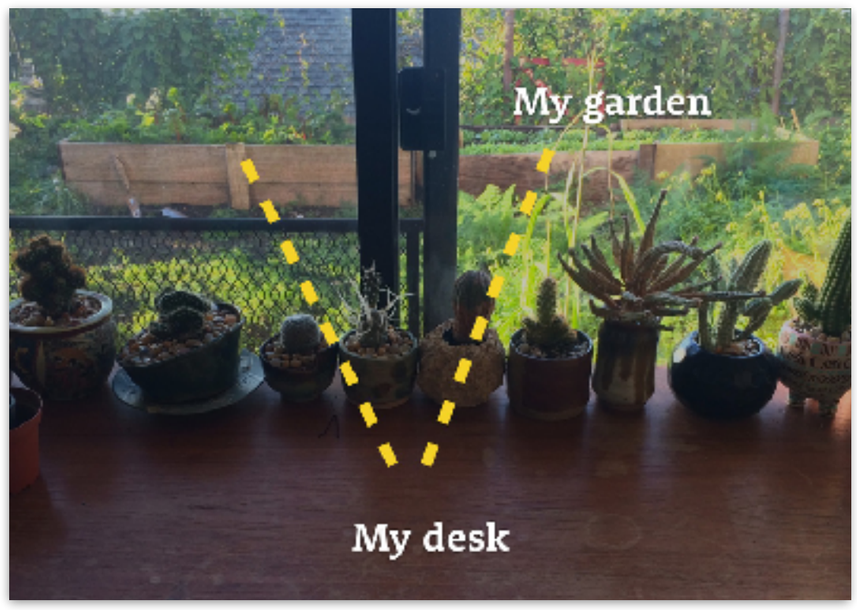
If you garden smart, your garden only needs a couple minutes of your time each day -OR- an hour once a week for small gardens.

But you do want to have an eye on your garden on a regular basis to notice any pest or disease issues before they become a problem.

Plants like the company and respond well to a little daily praise. Plus you'll notice when they need a little extra water.

Three options to prioritize your garden daily:

1) Walk by the garden on your way out each day.
2) Position the garden so you see it out your window.
3) Post a reminder on your fridge.



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5th Key

1-2” (3-5 cm) rainfall or water each week

Too little water and plants stress, but too much water and nutrients wash away. 1-2” (3-5cm) per week is just right for most vegetables and herbs.

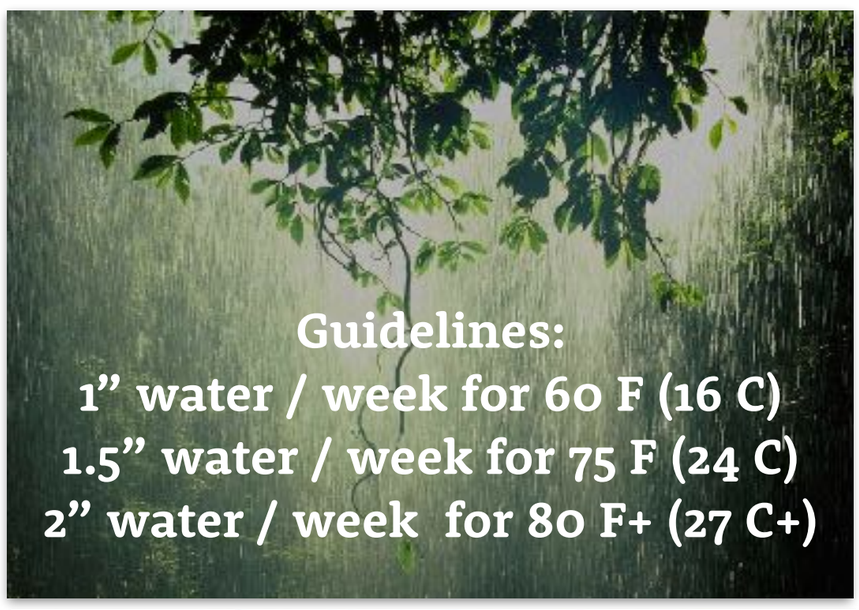
Water is life and when plants are dehydrated, they get stressed. That stress attract pests & diseases (kind of like us).

If you have to haul water to your garden every day, you won’t have a garden for long. Make gardening easier and plant near a water source.

Better yet, invest in drip irrigation or ollas that automatically drip precious water right near the roots of the plants.

The more you can automate your watering, the less daily gardening you will have to do.

Other options: rainwater collection, hugelkultur, berms and swales on contour, or self-wicking beds that retain lots of moisture.



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After evaluating all five keys, which key is most challenging for your garden space?

Keep in mind there are almost always creative solutions and actions you can take to improve your harvest.

The keys are in order of importance so start at the top and work your way down, one step at a time. You got this!

The 5 Key checklist to ensure your garden space grows an abundant harvest

- [ ] **Key 1: 6-8 hours of sunlight or more**

  Observe the sunlight on your site each hour and add up the number of hours with sun.

- [ ] **Key 2: 55-85° F (10-29° C) for peak growth (night)**

  Remember this is air temperature. Mark your calendar when this peak growth is in effect.

- [ ] **Key 3: dedicated space to grow vegetables & herbs**

  Claim your territory so that you can cultivate healthy biology for those root systems.

- [ ] **Key 4: in your line of sight (daily or weekly)**

  Remember to visit your babies, and they will want to grow big and strong for you.

- [ ] **Key 5: 1-2” (3-5cm) rainfall or water each week**

  Automate this as much as possible and you’ll have almost no garden work left to do.

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Does your garden get 6-8 hours of sunlight or more?

Map the Shadows on Your Site

INSTRUCTIONS:
STEP 1: Draw your site to scale.
STEP 2: Each hour, shade the shadows on your site with a different color pencil.
STEP 3: Look for white spaces on your drawing which will indicate areas that are receiving full sun. Plus add up how many hours of sunlight each area gets even if it's in shade for part of the day. Goal is to know which areas get less than 4 hours, 4-6 hours and 6+ hours of sunlight.

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Digging Deeper: Doing the best with your local conditions

Not everyone has ideal growing conditions!

Specifically, the right temperatures are challenging for many growers.

Now that you know what temperatures you WANT, you can get creative and "extend" the growing season.

It's helpful to think of the earth like a battery

During the day, the sunlight heats the Earth's surface, charging up the soil. When the sun sets, the Earth cools off and loses it's charge, so to speak.

So while your air temperatures might be 40° F at night, your soil temperature might be closer to 50° F.

The good news is you can create shelters or blankets for your plants to create "micro-climates" that are more favorable for vegetable and herb plants.

Here are several examples. And you are only limited by your imagination! Try for yourself, because sometimes 5 or 10 degrees can double your harvest!

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Micro-climate tips

1. Create more Balance

2. Add HEAT

Covering soil reduces earth's temperature swings

Bare soil reflects more light and heat than when it's covered by plants or mulch. The reflected heat can heat up your garden, especially in regions with days 95° F+

Covering the soil with mulch or planting densely so that no soil is exposed to sunlight will keep the soil temperatures cooler during the day and warmer during the night.

Extreme temperature shifts (desert conditions) can stress out your plants. Just like your health when you go from extreme heat to extreme cold.

Bodies of water can raise air & earth temperatures

Water can store heat whether it's in liquid or solid (snow) form.

Add barrels of water inside your greenhouse to heat up the air around your plants. Make sure the barrels receive sunlight during the day and are a solid material. If sunlight enters the barrel, the water will grow unwanted algae.

Alternatively, cover your plants with plastic in the winter and use the snow as insulation. Temperatures beneath snow can be up to 20° F warmer than air temperatures!

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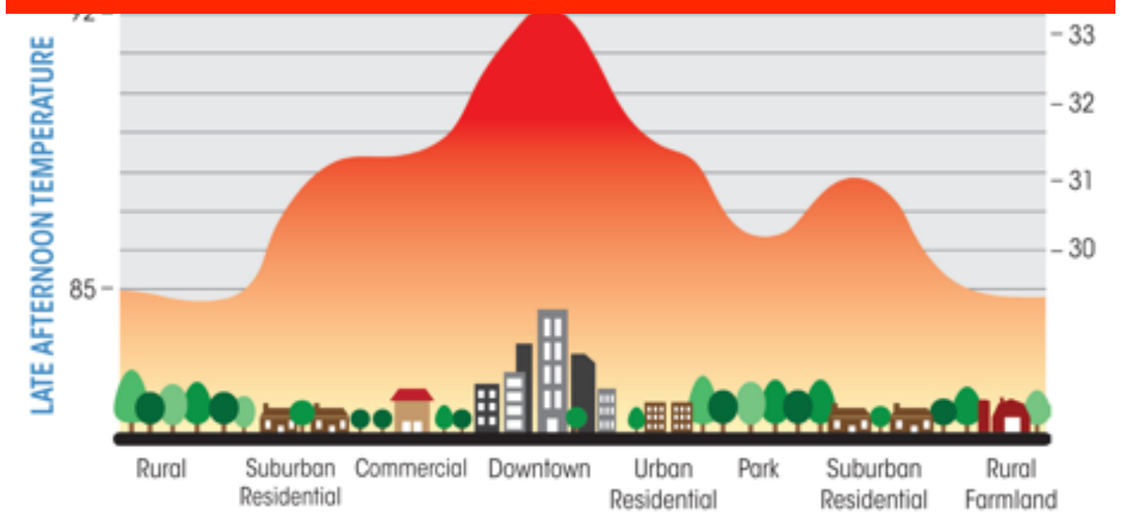
Micro-climate tips

3. Avoid frost pockets

4. Add HEAT



Hot air rises and cold air falls...

Even small dips and indentations in your lawn can form collection points for cold air. Have you ever noticed how frost forms in those dips first?

If you live in a colder climate, do not plant at the bottom of a hill. That area will be the first to frost and that's not what you want for your vegetables!

If you are planting on a hill in a hot climate, plant warmer temperature plants at the top and cooler weather crops at the bottom.

Hard surfaces absorb and reflect heat back to plants

If you live in the city near a lot of paved surfaces, temperatures can be 5-10° F warmer than in an area with a lot of vegetation.

Use this concept to your advantage.

To protect crops from lower temperatures, build rock walls that can collect the heat during the day and reflect it back to the plants at night.

Remember how the Earth is like a battery, now you are creating a built up battery around your garden.

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