



THE COMPLETE GUIDE TO GROWING AND SELLING MICROGREENS

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Published by LOCALBUSINESSPLANS.COM



INTRODUCTION

WHAT ARE MICROGREENS?

Before I started Nightlight Farms, I didn't have a clue about what Microgreens were. When I first heard the word, I imagined baby spinach or some other sort of petite salad green. Then, a friend of mine told me I should try selling them to restaurants. I wanted to get some vegetables in the ground, but didn't have any land, so I figured that I would try to grow them in my basement and see what happened. Fast forward 3 weeks, and I found myself delivering Nightlight Farm's first order of Microgreens to a local chef! Anyways, back to the Microgreens definition.

Microgreens are a gateway crop

For those of us who have limited experience growing anything, Microgreens are an excellent way to start growing food and making money doing it. Once you get the hang of Microgreens, I guarantee that you'll start wanting to grow more produce. Not because you have the romantic idea of a garden, but because you see the incredible opportunity to make money doing it. Food prices are on the rise and the demand for high-quality, organic food has never been higher. Microgreens are the perfect introduction to building a strong local food movement in your city.

Why Microgreens?

- They're highly profitable
- They grow quickly (7-21 days for most crops)
- You don't need previous growing experience!

Our Approach

We've developed this course because starting a business takes a lot of work. None of the steps are individually all that difficult, but together, can overwhelm even the hardest working entrepreneur. This course will help you accomplish each step quickly and efficiently while guiding you on your path to success.



This course includes everything you need to build a profitable Microgreens business. When you're bootstrapping a business, the most important thing is generating cash flow as soon as possible. With this guide, you could be earning money within 3 weeks!

A note on being Lean

The purpose of this model is to get you making money quickly, with as little startup cost as possible. This helps to keep your cash flowing and your business in business. The vast majority of new businesses fail before they pay their initial investment off from money earned. This course is designed to put you in the successful 10% of new businesses that Succeed!

Let this course be your “Training Wheels”

Imagine you are just learning to ride a bike (building a business). Now, imagine you've got a set of training wheels installed (this course). These training wheels will keep you from falling down and allow you to get the feel of what it's like to ride a bike.

Similarly, once you've got the hang of riding the bike with the training wheels on, you'll be itching to take them off and free yourself for the real pleasures of riding a bicycle. This course is no different. After you get the hang of running your Microgreens business, you'll be itching to try new techniques, bring in new products, and experiment with different things to truly enjoy the freedom of running your own business.

So, treat this Microgreens course as the set of training wheels that it is. Utilize it to help you get the hang of things, and as soon as you feel comfortable, start trying some new things! That's when the real excitement will begin.

Let's get started!

-Luke

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QUICK START SCHEDULE

If you're eager to start your business before reading the entire course, I don't blame you. In this section, we've outlined the order you should go about things. With that said, you'll definitely benefit from reading course in its entirety to understand why we do each step.

Pre-requisite - Market Research

Find the number of Farmer's Markets in your locale (within 30 mi.)
Find the number of Restaurants with plates over \$15 in your locale
(these are the most likely restaurants to purchase your Microgreens)

8-STEP GETTING STARTED GUIDE

Note: *We've included a sample timeline of when to do each task. This is all relative to a starting date of late February. It is meant to give you a concept of how quickly you can get started. It is not meant to be a strict timeline!*

1. Complete and submit your Farmer's Markets Applications (immediately). Many markets have so many vendors competing for a spot, there is little chance of getting in after applications are already submitted. Best to make sure yours is in on time. Make a spreadsheet of Farmer's Markets in your area.

2. Purchase these seeds (immediately):

Sunflower Shoots 5# (\$27.80)
Sunflower Shoots - MV Seeds

Pea Shoots 5# (\$9.25)
Pea Shoots - MV Seeds

Radish, Daikon 5# (\$32.00)
Daikon Radish – MV Seeds

3. Build the grow station frame and purchase 8 lights (Any time before March 6)

4. Buy soil and growing tools (any time before March 3)

5. Grow 1 tray of each crop (4 trays total: 1 sunflower, 1 pea, 2 radish) (Start on March 3 for restaurant delivery on March 11)

6. Procure Packaging, Labels, Fresh Sheet, and Business Card (any time before March 12)
7. Bring to restaurants (March 12)
8. Sell at Farmer's Markets (Dates TBD based on your market)

Total Startup Cost

Outlined below is a breakdown of all the costs associated with starting your business. Your costs will undoubtedly vary, but this should be close enough to give you an idea of what each aspect will cost.

You'll notice that there is a large discrepancy between the low and high costs. The difference is entirely from the Marketing and Administration sections. In fact, the accounting software can almost double your startup costs! Beware of that when choosing which system you want to use for your business.

Without further ado, the approximate costs...

Growing Accessories

- Water Hose with sprinkler attachment (\$15.49)
- Tamper for packing seeds (\$10.00)
- Seed Scoop (free)
- Seed Storage (free)
- Seed Trays (11"x21") 40 trays (\$80.00)
- Paper Towels (\$5.00)
- Grow Data Sheet (free)
- Clipboard and pen on string (\$5.00)
- Growing Subtotal: \$115.49**

Grow Station

- One Maxi Rack 72"H x 48"W x 24"D Steel Shelving Unit (\$102.99)
- Four Lights - \$20 ea. (\$80)
- Pack of ten Light Bulbs (\$34.00)
- One Surge Protector - (\$12.99)
- One Outlet timer (\$13.20)
- One 50' Outdoor Extension Cord - (\$30.00)
- Grow Station Subtotal: \$273.18**

Seeds

- Sunflower Shoots 5# (\$27.80)
- Pea Shoots 5# (\$9.25)
- Radish, Daikon 5# (\$32.00)
- Seeds Subtotal: \$69.05**

Harvesting

Stainless Steel Harvesting Knife (\$7.64)

Scale (\$35.99)

Harvesting Subtotal: \$43.63

Packaging

EcoProducts' EP-RC16 (\$85.00)

Plastic Bags (\$15.00)

Twist Ties (\$3.00)

Packaging Subtotal: \$103.00

Marketing

Fresh Sheet (free - \$50.00)

Business Cards (free - \$60.00)

Labels (\$30.00)

Marketing Subtotal: \$30.00 – \$110.00

Administration

Register your Business (\$100-\$300)

Bank Account (free)

Insurance (\$50/month)

Accounting Software (free - \$400)

Administration Subtotal: \$150.00 – \$750.00

GRAND STARTUP TOTAL

Low: **\$784.35** High: **\$1,464.35**

I. PRODUCING

This section is focused on teaching you how to effectively produce your Microgreens for sale to restaurants and farmer's markets.

A brief outline of the section is as follows:

A. GROWING

1. Growing Basics

- a) Where to Grow
- b) Growing Materials
- c) Why Organic?

2. The Grow Station

- a) Grow Station Shopping List
- b) Grow Station Construction
- c) Grow Station Specs

3. Growing Techniques

- a) Prepare the Tray with Soil
- b) Seeding Trays
- c) Watering Crops
- d) Drying your Crops

4. Crops

- a) Sunflower Shoots
- b) Pea Shoots
- c) Micro Radish
- d) Additional Crops

5. Growing your First Crop

- a) Sample Grow Schedule

B. HARVESTING

1. Harvesting Materials

2. How to Harvest

3. How to Wash

4. Composting

C. PACKAGING

1. Packaging Materials

2. How to Package

A. GROWING

This section is dedicated to teaching you the basics of growing high quality Microgreens.

1. Growing Basics

This section discusses where to grow and what basic materials to purchase first.

Where to Grow

You've got a couple options in choosing where you set up your growing facility, all with different pros and cons. For getting started, I prefer finding space in an unused basement or garage. I like this because it has most of the right conditions (may need to be heated) and is a traditionally underutilized space that can be rented for a very small amount per month. With that said, if I had the opportunity to use a greenhouse, that would be my next preference. I have no experience growing in a greenhouse, so I can't recommend that it's a perfect option, although it is certainly worth exploring.

Before we get into the different options, let's look at the ideal conditions for growing Microgreens. The conditions that Microgreens like aren't too different from what people like.

Ideal Conditions

- Dry
- Warm
- Lots of light

There is no wrong choice amongst these three. If you can't decide between your options, consider the proximity to your residence. The closer it is, the less time you'll spend in transit. The important thing is that you choose something that will work well for you and get started.

Outdoor

- Can be dry or wet. Would need a covering to keep rain off.
- Probably gets cold at night. This means growing will be limited to spring/summer/fall.
- Lots of light. You'll get the most natural light this way.

Indoor

- Dry - rain not allowed inside (unless it brings wine).
- Warm - room temperature (68 – 72F) is ideal for Microgreens
- No Natural light - Growing in a windowsill will not be enough light. You'll need artificial lighting.

Greenhouse

- Dry - Out of the rain
- Warm - Greenhouses naturally stay about 10 degrees warmer than the outside. You can also heat them easily
- Natural Light - This is comparable to outside light and can be artificially lit if needed.

Growing Materials

There are a few items that will make your work more efficient. They are outlined below. Feel free to deviate from this list. Each of these products has worked well for me, but I'm sure there are other products that will work better just as well for you.

1. *Water Hose with sprinkler attachment (\$15.49)*

Hose nozzles are notorious for working well in their first few months and then turning to junk. Be smart and spend a few more dollars initially on something that will serve you for years to come. My favorite is the Gilmour Pistol Grip Nozzle, which you can find on Amazon.com.



Water Hose with sprinkler attachment

It has great reviews and has worked well for me. With that said, don't be afraid to do your own research and buy something you are comfortable with.

2. *Tamper for packing seeds (homemade)*

Definitely make one of these! I don't know if anyone manufactures them commercially, but this thing is the key to filling trays with soil efficiently. When I first started, I was using a flattened cereal box to compress the soil, and it worked OK which kept me from taking the 20 minutes to build something custom. When I finally did, I couldn't believe that I had waited so long to come up with one. The photo is above, but don't feel like you need to copy my design exactly. With a bit of thinking, I'm sure you could come up with a design that works just as well tailored for you.



Tamper for packing seeds

3. *Seed Scoop*

I use this little plastic thing religiously to spread all of the smaller seeds. It's just an old protein powder scooper. I like it for two reasons:

- Size: It's the goldilocks size, but the exact size doesn't matter because you'll be making your calculations of seeds/tray and scoops/tray based on the size of your scoop.
- Long Handle: It makes reaching into the seed tubs easy.



4. *Seed Storage*

The bags that seeds come in are no good for the frequent access that you'll be demanding of it. Instead, I have found that old protein powder containers work very well. They are opaque which keeps light from getting in and damaging the seeds. Also, they have wide mouths so I can get my big hands in to scoop out the seeds. I couldn't find a link to purchase new ones, so you'll have to make friends with your local meatheads, or get creative and come up with your own seed storage!

5. *Seed Trays (11"x21"), 40 trays (\$80.00)*

Make sure to buy the shallower 1" deep germination trays. The shallower trays are better because they're actually thicker. The depth makes it easy to add just the right amount of soil, and it's easier to harvest the greens.

Also, don't buy them retail! They'll be half the price if you find a bulk supplier. Ideally, you'll have about 100 of these on hand, but if you want to keep your initial investment low, buy 40 now and more later on.

6. *Paper Towels (\$5.00)*

I use these for two purposes:

- Putting in a half sheet with orders to absorb moisture and keep freshness. (If the crops is more wet than normal, I'll put in a full sheet of paper towel to absorb the extra moisture).
- On top of the germinating seeds to hold in moisture and act as an artificial soil layer.

For both applications, I prefer the recycled, unbleached paper towels for the minute ecological impact it has. I've found that they are actually more expensive than their bleached counterparts, which doesn't make a lot of sense. Either way, the difference in price is negligible.

When to use Paper Towels as a "soil" layer on your germinating crops:

I use paper towels as the top "soil" layer after planting all seeds except sunflower and pea. I do this for the following reasons:

- Keeps the crops free of soil that would have to be washed off during harvest
- Keeps the moisture in the seed while it is germinating
- Keeps the seeds in place when stacking the trays during germination

I don't use paper towels for sunflower and pea crops because they do just fine without any top layer and won't stick to the bottom of other trays when I stack them during the germination period.

Note: When paper towels are on top of germinating seeds, they have a tendency to wick the moisture from the seeds as they dry out. It is incredibly important to keep an eye on the paper towel to make sure it is moist all the time. Otherwise, you will experience poor germination rates.

7) *Grow Data Sheet*

You'll transfer the data from this sheet to your spreadsheets every Wednesday. You can find the grow trial datasheet in the Excel templates provided.

8) *Clipboard and pen on string*

Use this time tested combo to hold your data sheets near your seed filling location so you can easily fill in the fields as you seed each tray.

Why Organic?

With this simple business, there are three methods to being "organic":

- Use organic Seeds
- Use organic Soil
- No pesticides or petroleum-based fertilizers



My thoughts on the Organic Certification:

I absolutely think that organic should be the rule, not the exception. If we look back in time 100 years, every single farmer was "organic." It wasn't until the green revolution that anyone had the option to use "conventional methods" with petroleum-based products. Similarly, if we look forward 100 years, I am confident that the vast majority of people will be organic.

With that said, I have a difficult time seeing a need to justify paying a 3rd party to come in and give me the stamp that they have invented. However, if I was planning on selling my greens throughout the country to big chains (the antithesis to local business), then I might consider this certification.

How I communicate this to my customers:

"I use all organic methods, but I am not certified organic."

This is a simple statement that communicates my values and elicits a dialogue should the client be so inclined. I've actually had a lot of great conversations on the matter with my chefs and especially with the farmer's market crew. I encourage you to become versed on this

subject in order to be able to clearly articulate your business' values on the matter.

2. The Grow Station

In this section we'll detail how to set up your growing operation. This is the easiest and cheapest way to get started. I absolutely recommend following these steps initially. Over time, you may come up with a better solution for your needs, but this will get you started growing fast and allow you to focus your energy on more important things like acquiring clients.

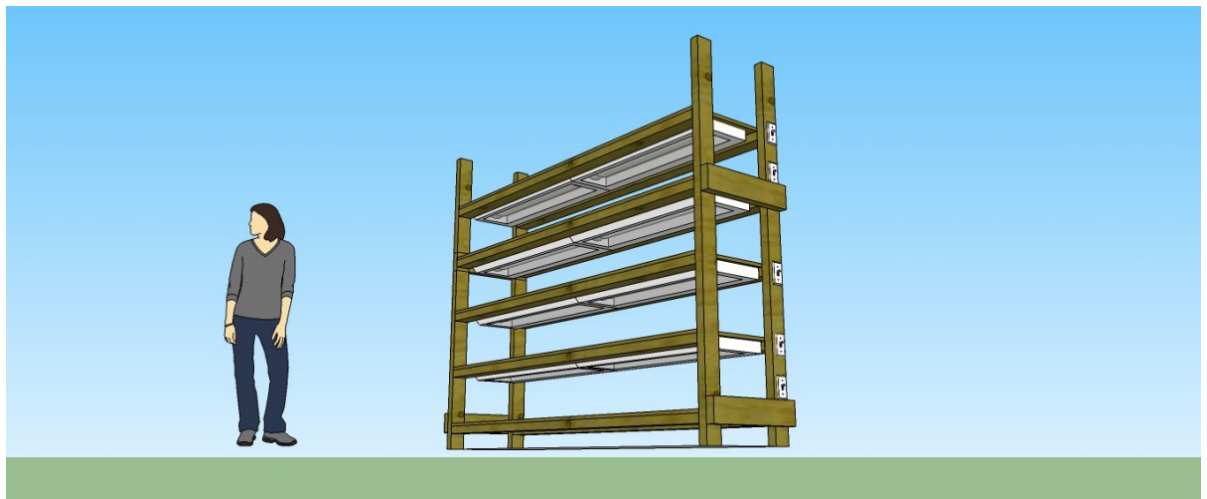
Why a grow station?

The grow station is designed to give you as much production in as small of a space as possible. When I first started, this meant creating one shelving unit with 4 levels of lighting.

Is the grow station right for you?

The grow station is for indoor Microgreen production. I only recommend building this setup if it is going to be inside.

If, however, you are growing outdoors or in a greenhouse, you can come up with a simpler setup to support the trays and allow the natural light to get in. When growing with the sun as a light source, you must have adequate space between the levels to allow the light in. There is no exact height between shelves, it's just something that you'll have to experiment with a bit to determine what works best in your conditions.



Limitations of this Grow Station:

There are a few things to be aware of with this grow station. Nothing big, but they are worth mentioning:

1. The structure is metal but the shelves are made of particle board.

Because the shelves will get wet when you water them, they can wear out and deteriorate quickly. Something you want to avoid. You can replace the shelves later with melamine, or you can cover them with a sheet of plastic from a painter's drop cloth.

2. 5 Levels of Production instead of 4.

You can actually get 5 levels of production from one unit. The only trick is that you'll need to come up with your own custom top light support because the unit only comes with 5 levels of shelving. This is an easy fix, but not as easy as if it came with 6 shelves out of the box.

Grow Station Shopping List

Structure: We have chosen the following structure because it is easy to assemble, it is relatively cheap, and the perfect size to fit just about anywhere inside. You can absolutely come up with another solution to supporting trays and lights. As always, drop me a line if you find one better and I'll be sure to share it with the community.

- One Maxi Rack 72"H x 48"W x 24"D Steel Shelving
Unit = \$102.99 (Find on Sears.com)

Lighting + Electrical: The lights discussed below are the key to the high quality of the greens and low operating cost of the grow station. The important things to know about these lights are that they are T5 fluorescents with a "grow spectrum" bulb. These bulbs are perfect for growing plants in vegetative growth, but they do not have the right spectrum to allow these same plants to flower. This is perfect for us because we just need our Microgreens to have strong vegetative growth before we harvest them.

- Four Lights (\$20 each): \$80 (Find on HomeDepot.com)
- Pack of Ten Light Bulbs: \$34.00 (Find on HomeDepot.com)
- One Surge Protector: \$12.99 (Find on Sears.com)
- One Outlet timer: \$13.20 (Find on Sears.com)
- One 50' Outdoor Extension Cord: \$30.00 (Find on Sears.com)

Total: 170.19

Grow Station Construction

There are limitless ways to build a grow station that fits your needs. To make things easy, I recommend you buy a metal shelving rack as outlined below. If you have building skills, feel free to build a custom unit out that fits perfectly into your space and fits your needs.

I like this metal construction, because of how easy it is to assemble and install. The process couldn't be simpler.

Start by building one of these, it can handle 4 trays per level, and with 4 levels, it can handle 16 trays at a time. This will be plenty to get started growing Microgreens. When you are ready to grow more at once, you can simply buy another unit and double your production.

- Assemble the shelving with 1' between the top and the bottom of the shelves
- Attach the lights centered on the bottom of the upper shelf with screws
- Plug lights into the power strip
- Plug power strip into timer (timer set for 16hours)
- Plug timer into outlet
- Start Growing!

Grow Station Specs

Below we'll calculate how many trays of production and how many Kilowatt Hours of electricity we'll be consuming for each tray per day.

Growing Area:

1 level (of shelving) = 2' X4' = 8 Sq. Ft of growing space = 4 tray capacity.

4 levels = 8 Sq. Ft * 5 = 32 Sq. Ft. of growing space = 16 tray capacity.

Footprint = 2'x4' = 8 Square Feet.

Lighting:

1 light unit = 28Watts X 2bulbs T5 bulbs Fluorescent 48"

1 level = 4 lights. 56W

4 levels = 4 lights. 224W

16 hours of lights * 224W = 3,584 Watt-Hours

4,480 Watt-Hours / 1,000 Watts = 3.58 Kilowatt Hours

Average Price of Kilowatt Hours = 10cents

10c * 4.48 KWH = .36 cents per day

Cost of electricity for 1 grow station = .36 cents/day

Cost of electricity/tray = .36/16 = .023 cents/day

3. Growing Techniques

This chapter is all about how to perform the necessary techniques. To give you a glimpse of how I started, below is a journal entry I made when reflecting on my growing Microgreens for the first time:

My Grow Journal:

"I went to the local urban farm store the other day and bought six packs of seed, six plastic trays, and some seedling mix. I figure, the best thing to do is get started.

So, I put the soil in the trays, then the seeds on top, and finally brown (recycled w/o bleach) paper towels on top of that. ah, but before the seeds and paper towels, I watered the soil with a hokey setup of a pitcher (from my roommate's blender and a vegetable steamer (to disperse the water).

After the paper towels were laid down over the seeds, I watered them too, not really knowing how much to put on.

After inspecting the seeds the next day, I realized that the soil was pretty dry (my basement is very dry because the furnace is down there), so I surely could have added more water. Luckily in the next few days, I came up with some sprouts... hooray! Now the big task is to keep these little guys from dying.

It's been 4 days since I germinated the seeds, and all 6 trays have sprouted. The peas took the longest, but I just checked them a few minutes ago and can see that most of them have taken root, although they will still spend tonight under the paper towel.

As a side note, one packet of each seeds did not come anywhere close to filling the trays like I wanted to. I'm going to need way way more seeds if I'm going to continue this method of growing."

Needless to say I've come a long way with this. As usual, read through this advice, give it a shot my way, and then continue to improve on it and make it your own.

Prepare the Tray with Soil

The first step of growing is to fill the trays with soil.

Our goal is to create a soil filled tray that has the right conditions for starting seeds. This means it will have the right moisture and flat enough that each seed keeps from rolling into the other seeds. If the soil is uneven, lots of seeds will collect in the same place and increase the risk of mold.

I have always used the best soil I can find (Fox Farm Ocean Forest - Find on Amazon.com).

In fact, I know that one of my direct competitors uses the same seed I do and restaurants have chosen my greens over my competitor's because the taste was far and away superior to his. Take a lesson from me, and give your greens the highest quality soil you can.



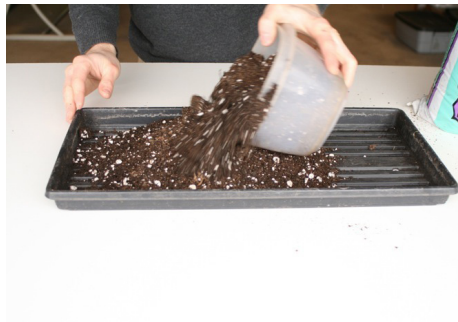
A note on the quality of soil:

One of the biggest predictors of a quality product is the soil you use to grow your greens in. I am told again and again that my Microgreens are the best the chef/customer has ever tasted. This is no coincidence.

Now, with that said, at a retail price of \$15/1.5 cubic foot it is certainly expensive, so you want to make sure of a chocolate cake. It should not be so wet that the tray is draining water. And, likewise it should not be so dry that there is a gap between the soil and the tray. Good soil with high organic matter content acts like a sponge. You can keep adding more water and it will just absorb it.

In fact, if the soil is "thirsty," you'll notice that it absorbs water quite quickly, and if it doesn't need to be watered it will take longer for the soil to absorb (with that said, if it is way too dry, it will also take a long time to absorb). You'll get a feel for the right soil moisture with a bit of experience. Until then, just pay close attention to it as you water it and don't worry too much about getting it exactly right.

Your trays are now ready to seed!



Seeding Trays

Once you have filled your trays with soil, you are ready to seed them. There's nothing too tricky about this.



There are a couple of things to remember:

Spread the seeds as evenly as you can from the air. It's best not to touch the seeds and move them with your hands after they've landed, because it coats them in wet soil and will add dirt to your harvest.

Seed them much denser than you think you'll need. It's crazy how much seed you use per tray. You'll do diligent trials to see what amount of seed creates the best yields, but for now just go by the guidelines I have included in section 1.1.4.

Find a method that works for you. As I've said earlier, I have a protein scooper that works well for spreading seeds. As I'm seeding a tray, I'll spread one scoop's worth, then 1/2 a scoop, then measure it. The amount of scoops of seed per tray obviously depends on the size of your scoop. I have a spreadsheet detailing how many scoops of seed go into each tray, but we'll get into that later.

Some seeds need a soak

Because some seeds love water so much, you can ensure a full germination of your crops if you soak the seeds for 3-12 hours beforehand. Be careful though, if you leave the seeds too long you can actually drown them.

The only seeds you'll soak are sunflower and peas. I've tried soaking a few other types to see what happened, but nothing beneficial came of it. With that said, don't be afraid to experiment!

Stacking trays after seeding them

You want your little baby Microgreens to grow up big and strong don't you? Nod your head. Okay, good answer.



Seeds Soaking

The trick to encouraging strong growth for bigger yields and hardier crops is achieved by putting your greens on a strict weight lifting program from day one. No need to go out and buy the latest Bowflex or Nordic Track. All you have to do is stack the trays on top of each other while they are germinating. You'll be amazed to see the little green guys lifting up all the trays stacked on top of them as they germinate and grow their first inch.

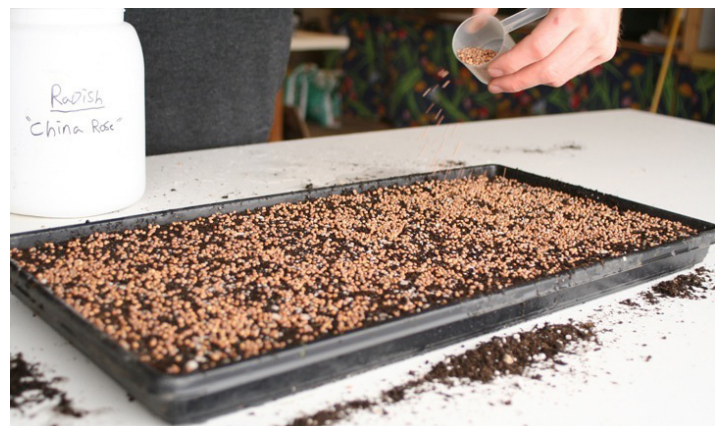
Each day you'll unstack the trays, water them, and then restack them in a different order to make sure all of your crops are being equally challenged. Once the greens are out of the soil 1/2"-1" they are ready to be unstacked and placed under lights.

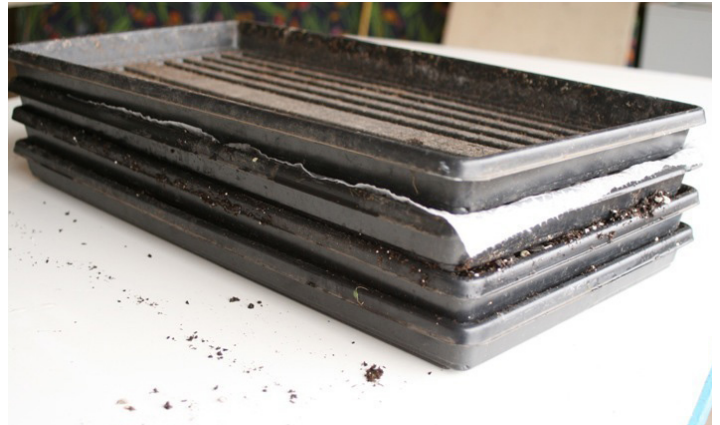
Side note: *You can stack all types of crops, but do your own trials and see which ones respond to stacking the best.*

Example Process: Seeding Trays w/ Radish Seeds

1. Prepare soil in tray (previous section)
2. Bring Radish seed container to seeding table
3. Fill scoop full of seeds
4. Spread seeds evenly by tipping the scoop over and shaking back and forth (about 8" above seed tray)
5. Fill scoop 1/2 full
6. Spread remaining seeds as above.
7. Cover it with a paper towel.
8. Water (next section)

Side note: *Seeding sunflower, peas, and other Microgreens follows this same pattern. The only difference with sunflower and pea shoots is that, because of their larger seeds, you may prefer to have a larger*





scoop on hand. All other Microgreen seeds will work well with the smaller scoop.

Watering Crops

There are two distinct stages of growth for Microgreens. The time before they have sprouted enough to be placed under light (the germination stage) and the time they are growing under lights and are awaiting harvest (vegetative growth). While they will take roughly the same amount of water in each stage, you will use different settings on your hose nozzle: 'Mist and Shower.'

Germination Stage – Mist:

During this stage you will set your water nozzle to “mist” and water the Microgreens daily for 3 seconds. We use mist in this stage because the high pressure saturates the paper towel most effectively. After the crops have germinated we remove the paper towels (for the crops that use paper towels) and place them under light.

Vegetative Growth (under Lights) – Shower:

During this stage we set the water nozzle to “shower” because it gives lower pressure and higher volume needed to get water to the soil without knocking down the often delicate Microgreens and causing them to rot.

Other considerations:

Rot/Mold: Rot and Mold is created when two wet leaves are in contact with one another without drying out. Our aim is to keep the Microgreens in a dry environment. Ideally, we would water them from the bottom, keeping their bodies and leaves from ever getting wet. But this isn't practical, so we take care in not overwatering the greens, or allowing them to fall down from the pressure of the water.

Rule: No Watering 24 hours before Harvest: When harvesting Microgreens, you want them to be absolutely dry before going into any packaging. If the greens are packaged wet, they will deteri-



orate much more rapidly. To keep them dry for harvest, don't water them within 24 hours of your expected harvest.

Drying your Crops

When your crops are wet, you want to dry them out. If you don't, you'll be exposing them to more risk of rot and mold. Use these simple techniques to dry your crops if they are "too wet." You'll also use these techniques to dry your Microgreens after you wash them.

What is "too wet?"

Regular watering is not going to make your crops too wet. Your crops are too wet if they still appear damp 24 hours after you water them.

Still Growing:

If the live ones are wet, simply blow a fan across the top of them and they should dry out.

Post-Harvest:

If, after harvesting, the greens are still wet, dry them by placing them on a screen and blowing air over for as long as is needed to dry them adequately. This could be anywhere from 5 minutes to 2 hours depending on your specific conditions.



4. Crops

This section is dedicated to an in-depth explanation of each of the three crops that you'll be growing. As always, use these techniques to get started and always look for ways to you can improve them.

Sunflower Shoots

This is my favorite crop to eat. When you're growing anything for production, you'll invariably end up with surplus product on occasion. Well, I intentionally grow an extra pound per week to eat as a base for salads. They're that good!

In fact, at the farmer's market, lot of people don't know what sunflower shoots (let alone Microgreens) are. To hedge this, as soon as someone gets within range, I ask them if they'd like a sample... haha, and before they have time to answer I cut some from my sample tray and hand it to them. The result? They love them! I'd say that people who try samples of sunflower shoots will buy them 9 out of 10 times.

Seeds/Tray: Sunflower Shoots

Days to germinate: 3

Days under lights: 6

Days to harvest: 9

Typical Yields: 16-24 oz. per tray

Germinating Process:

1. Soak them overnight
2. Drain and let sit for 3 hours
3. Spread them onto tray
4. Stack them onto each other (7 trays max)
5. Each day (until day 3), unstack all trays and water with a 'mist' setting for 3 seconds

Growing Process:

1. On 4th day, Place under lights
2. Days 4-8, Water daily shower setting for 2-3 sec
3. Day 9, Harvest

After 3 days, the trays will start growing! The sheer force of all these seedlings will actually lift the entire stack of seeds up to the point that if you wait too long, the whole stack of trays and seeds will fall over! Once the trays start 'growing' they are ready to be put under lights.

Pea Shoots

Treat these exactly like the sunflower seeds. The only thing different is how much water they absorb when you soak them overnight. As a rule of thumb, make sure you have 3 times the volume of peas of water in your soaking container. You'll be amazed how much they expand.

Seeds/Tray: Pea Shoots

Days to germinate: 3

Days under lights: 6

Days to harvest: 9

Typical Yields: 12 - 24 oz.

Germinating Process:

1. Soak them overnight
2. Drain and let sit for 3 hours. (The seeds can sit in the container they were soaking in).
3. Spread them onto tray
4. Stack trays onto each other (7 trays max)
5. Each day (until day 3), unstack all trays and water with a 'mist' setting for 3 seconds.

Growing Process:

1. On 4th day, Place under lights
2. Days 4-8, Water daily shower setting for 2-3 sec
3. Day 9, Harvest

Micro Radish

MicroRadish is one of the easiest crops to grow. They grow up tall and strong, give a big yield, and please the customers. I grow three types (China Rose, Daikon, and Triton) and call it my Spicy Radish Mix. You'll find that all kinds of chefs like the Spicy Radish Mix.

Seeds/Tray: MicroRadish

Days to germinate: 3

Days under lights: 6

Days to harvest: 9

Typical Yields: 12 oz. - 22oz per tray

Germinating Process:

1. Spread seeds evenly onto tray
2. Cover with Paper Towel
3. Spray Paper Towel with 'mist' 3 seconds
4. Stack them onto each other (7 trays max)
5. Each day (until day 3), unstack all trays and water with a 'mist' setting for 3 seconds

Growing Process:

1. On 4th day, Remove paper towels and place under lights
2. Days 4-8, Water daily shower setting for 2-3 sec
3. Day 9, Harvest

Additional Crops

Now, you've realized what I mean, when I say that Microgreens are a gateway crop! You've gotten good at growing your 3 staple crops and want to grow even more! More Microgreens and more crops!

Once you've gotten the hang growing the basic 3 (radish, sunflower, and pea), you'll be ready to start growing different crops. Other Microgreens, salad greens, tomatoes, and more will start enticing you to grow them.

I recommend that you start making some Microgreen mixes next. These will attract even more chefs to you.

Microgreen Mixes

Chefs love mixes of Microgreens. It makes it easy to add a colorful dynamically tasty garnish to any plate that they want to add a bit of color too. Each of my mixes is tailored to one of my chefs' personal preference, which certainly varies across chefs and their cuisine. Once you create a mix and grow a batch of it, bring a sample to your chef, have them try it and give you their feedback. The more you include the chef in this process, the more they'll feel like they own the mix and want to use it on plates as well as come up with new mixes that they'll like.

Below are a few mixes that have worked well for me, but do your clients a favor and come up with your own that are custom suited to their menu.

- Spicy Mix: Triton, Daikon, China Rose, Mustard, Cress, Arugula
- Salad Mix: Swiss Chard, Pac Choi & Radish
- Bread + Butter Mix: Sunflower Shoots + Pea Shoots

Specialty Microgreens

Once you have more relationships with more chefs, start talking to them about what they like and what they don't. There are some specialty crops that, like a fine scotch, absolutely cannot be mixed!

I recommend adding the following to your fresh sheet and telling your chefs that you can grow these special to order.

- Cress
- Shiso (for Japanese restaurants)
- Micro basil
- Chervil
- Celery
- Cilantro
- Kale
- And many more...

Field Crops

This is where it starts getting good. Now that you've established a presence in the farmer's market, people will know you as one of the few urban "farmers." If you want to find some land to farm, simply advertise with your clients, and you should have some prospective yards by the end of the week. If you're looking to get serious and find something greater than 1/2 an acre, we're developing a course just for that!

Email us if you're interested in it.

Once you secure a bit of land and are ready to start growing some field crops, the list of crops below is a good place to start:

- Salad Mix - Arugula, Lettuce, & Sunflower Shoots
- Tomatoes
- Carrots
- Beets
- Patty Pan Squash

Growing with lights

Microgreens are incredibly easy to grow indoors because they thrive in room temperature and the relative dryness of the air. The only thing that isn't perfect about growing indoors is the lack of natural light.

Luckily for us, this is easily remedied by using low energy T8 fluorescent grow lights.

There are two important things to consider when using lights to grow:

1. The lights must be close to the crop! They should be no farther than one foot above your trays. As an example, when my pea shoots are ready to harvest, they are nearly touching the bulbs. If the bulbs are too far from the crops, they will grow tall and leggy and make for a bad yield.
2. You need a timer for your lights – Keep your lights on anywhere between 16 hours per day. (You can experiment with different light durations in the future, but this is a good starting point.) The important thing is to give your crops a consistent amount of light every day. Use a simple outlet timer to set this system up.

5. Growing your First Microgreens Crop

Start with the end in mind!

Now that you know how to grow the different crops, it is time to grow your first crop. This is the batch that you will bring to restaurants in 7-10 days.

Tuesday and Wednesday are the best days to bring samples into restaurants because it is less busy and the chef will have time to talk with you for 15 minutes.

We're going to grow our first batch of greens with the intent of harvesting them on Tuesday.

To determine when to start growing we simply look at the Days to Maturity (DTM) of the crops we're growing.

DTM's

- Sunflower - 9 days
- Pea - 9 days
- Radish - 9 days

This makes things easy for us. Most of the other Microgreens have longer DTMs which would have to be factored in accordingly.

Next, we'll have a look at what a typical growing schedule would look like if we wanted to harvest on any specific day. We'll use Tuesday, March 10 as an example.

Sample Grow Schedule

(Sunday, March 1 – Tuesday, March 10)

Sunday, March 1

- Sunflower: soak (QTY) seeds overnight
- Pea: soak (QTY) seeds overnight
- Radish: Plant 3 trays. Sprinkle seeds over previously prepped soil-filled tray and cover with paper towel. Water - Spray with “mist” 3 sec. (stack trays on top of each other)

Monday, March 2

- Sunflower: drain water from seeds. Wait 3 hours. Spread seeds over soil. Water - Spray with “mist” 3 sec. No paper towels needed. Stack trays on top of each other
- Pea: drain water from seeds. Wait 3 hours. Spread seeds over soil. Water - Spray with “mist” 3 sec. No paper towel. Stack trays on top of each other
- Radish: Unstack trays and water. Restack trays.

Tuesday, March 3

- Sunflower: Unstack trays and water. Restack trays.
- Pea: Unstack trays and water. Restack trays.
- Radish: Unstack trays and water. Restack trays.

Wednesday, March 4

- Sunflower: Unstack trays and water. Restack trays.
- Pea: Unstack trays and water. Restack trays.
- Radish: Unstack trays and water. Restack trays.

Thursday, March 5

- Sunflower: Unstack trays. Place under lights in grow station. Water- “shower” 2 sec. Make sure light timer is set to 16 hours on. 8 hrs. off
- Pea: Unstack trays. Place under lights in grow station. Water- “shower” 2 sec.
- Radish: Unstack trays. Remove paper towel. Place under lights in grow station. Water- “shower” 2 sec.

Friday, March 6

- Sunflower: Water (shower 2 sec.)
- Pea: Water (shower 2 sec.)
- Radish Water (shower 2 sec.)

Saturday, March 7

- Sunflower: Water
- Pea: Water
- Radish: Water

Sunday, March 8

- Sunflower: Water
- Pea: Water
- Radish: Water

Monday, March 9

- Sunflower: Water AM
- Pea: Water AM
- Radish: Water AM

Tuesday, March 10

- Sunflower: Harvest
- Pea: Harvest
- Radish: Harvest

B. HARVESTING

You've done such a great job growing your crops! Now it's time to brutally massacre them. They don't call Microgreens the veal of vegetables for nothing! Just kidding, it will be humane. Worry not.

1. Harvesting Materials

Not a lot of materials required here. Just a knife. The key is to get a knife that is incredibly sharp and will stay that way for a long time to come. Also, it should have a long blade (around 6-9") so you can harvest more with one swipe. The sharper the knife and cleaner the cut, the longer your products will last for your clients. Your greens, if stored dry and in an airtight container should last at least 1 week without a problem.

You may be tempted to purchase scissors for harvest. Don't do it. Scissors pinch the stem causing more damage and ultimately reduce the shelf life. Use a sharp knife. Your customers will thank you in the form of repeat business.

Stainless Steel Harvesting Knife - \$7.64 (Amazon.com)

2. How to Harvest

Again, the important thing to strive for here is to make a nice clean cut near the base of the stem. While it's a good idea to cut as close to the soil as you can to increase your harvest, make sure not to cut too closely to the soil or it'll end up on your blade and will dirty your crop. To remedy this, I keep a folded paper towel nearby so that I can wipe my blade on if I get soil on it.

Steps:

1. With one hand (your non-knife hand), take the greens in a loose pinch
2. Bend the greens lightly, giving them a bit of tension
3. Take the knife and slice near the base in one smooth motion (not a back and forth sawing movement)
4. Place the cut greens in a container (I use a simple Tupperware) where they will either be mixed or packaged directly
5. Repeat for the rest of the tray

3. How to Wash

Ideally you would grow your Microgreens in such a clean way that you don't need to wash them after harvesting. However, this is not always possible. If there is any trace of dirt you absolutely must wash your greens. Here's how:

1. Submerge the harvested greens in a bowl full of cold water skimming off any seeds or dirt.
2. Remove the wet greens from the water. Then place them in a spinning machine (manual or electric) which will dry them initially 80% of the way.



You can find a manual restaurant grade salad spinner at [Amazon.com](https://www.amazon.com).

Another spinning option is to use a converted washing machine that only does 'spin cycle.' If you go this route you'll also want to use mesh bags to hold the greens while in the spinner. To go the washing machine route, you'll need a bit of self-motivation. You can Google how to do this by using the terms "*Washing Machine -> Salad Greens dryer*".

A. Next, spread the nearly dry greens out on mesh (or a paper towel) and blow a fan over them until they are completely dry. This will typically take about 20 minutes to dry completely. Once your greens are completely dry, they are ready to be packaged.

4. Composting

After a few rounds of Microgreens, you'll end up with quite a pile of used soil. This soil certainly still has a lot of value even if you can't directly use it again for Microgreens because the roots are so entwined with it.

Your best option is to compost this soil. There are a million and one resources for this online, but if you really want to do it right, Google "flow-through vermicomposting systems."

This can be an incredible cost saving for you!

If you don't have space to compost your old soil, put the word out to local gardeners or farmers and you'll undoubtedly be able to find someone to pick it up from you weekly.

C. PACKAGING

Microgreens are a specialty crop, especially in the eyes of chefs. We want to display it as such. In this section, we'll explore how to help you get setup with packaging for restaurants and packaging for the farmers market.

1. Packaging Materials

Scale: \$35.99

This scale has been with me since my very first restaurant order. It's performed excellently, starts up within a few seconds and is always accurate (as far as I can tell). I wish it came with a 12 Volt DC charger to be able to plug it into the wall and not use batteries (but you have to buy it separately). Regardless, I highly recommend the Baker's Math Kitchen Scale as an entry level scale:

- Find on Amazon.com



Compostable clamshell containers

Restaurants

Compostable clamshells

I use compostable packaging clamshell containers for delivery to restaurants. They accept a labeling sticker and keep the presentation of the greens well. They run about \$85.00 for a case of 300 from my local supplier. You'll want to set up a business account with a local supplier for these. Often, they'll even deliver straight to your door.

Food Containers and Lids			
Item #	Size	Item	Qty.
EP-RC8	8 oz	PLA Rectangle Cont. w/lid	300/cs
EP-RC12	12 oz	PLA Rectangle Cont. w/lid	300/cs
EP-RC16	16 oz	PLA Rectangle Cont. w/lid	300/cs
EP-RC24	24 oz	PLA Rectangle Cont. w/lid	200/cs
EP-RC32	32 oz	PLA Rectangle Cont. w/lid	200/cs
EP-RC48	48 oz	PLA Rectangle Cont. w/lid	200/cs
EP-RC64	64 oz	PLA Rectangle Cont. w/lid	200/cs
EP-SH3-CPK	6"x9"	PLA Black Bottom Cont. w/lid	600/cs



EcoProducts' EP-RC16

Farmer's Markets

Plastic Bags (Farmer's Markets)

I use simple plastic bags that can be purchased in rolls of 1000. Make sure to get bags that are small enough to keep the greens looking big.

Twist ties for the bags (Farmer's Markets)

Keep it simple here with simple paper/wire twist ties to close the bags of greens.

2. How to Package

There are 4 principles to always keep in mind when packaging. Adhere to these and your crops will be properly packaged.

1. Keep it dry. Include a Paper towel to absorb any moisture
2. Display it neatly. Align the Microgreens whenever possible
3. Keep it fresh. Make the packaging airtight
4. Cool it down. Place in the refrigerator immediately after packaging

Below are the processes I use to harvest for restaurants and Farmer's Markets. They are very, very similar. The two differences are as follows:

1. Plastic bags for Farmer Market. Compostable clamshells for restaurants
2. No labels on bags for Farmers Markets

Harvest for Restaurants

Packaging Process:

Example - 15 ounces of Spicy Radish Mix for Restaurants on day of delivery

1. Harvest China Rose tray into container #1
2. Harvest Purple Triton Radish into container #2
3. Harvest Daikon Radish into container #3
4. Weigh all three crops and take note by using the template provided:
5. Mix all 3 crops together in container #4
6. Mix lightly (to keep from damaging the fragile greens) until the crop is adequately mixed

7. Layout packaging (compostable clamshells)
8. Place small paper towel squares at bottom of packaging
9. Fill 5 packages up near the top
10. Turn scale on
11. Zero out the scale with an empty package on it (with a paper towel at the bottom of the package)
12. Weigh each package
13. Make sure they each weigh 3.1 oz. or greater (add if necessary)
14. Place lids on all 5 packages
15. Place labels on each (shown in next section)
16. Refrigerate product ready for delivery
17. Place the rest of the harvest into an airtight Tupperware and save for own consumption or delivery within 1 day

Harvest for Farmer's Markets

Packaging process:

Example - 30 packages of Spicy Radish Mix for Farmer's Market

1. Harvest China Rose tray into container #1
2. Harvest Purple Triton Radish into container #2
3. Harvest Daikon Radish into container #3
4. Weigh all three crops and take note by using the template provided:
5. Mix all 3 crops together in container #4
6. Mix with "lettuce fingers" until the crop is adequately mixed.
7. Layout packaging (plastic bag)
8. Fill 30 packages up with 2 "handfuls." If there is any leftover, fill as many bags as you can
9. Turn scale on
10. Weigh each bag
11. Make sure they each weigh 2.1 oz. or greater (add if necessary)
12. Close all bags with a twist tie. Put the twist tie near the top and keep the air in it (Marketing tip: Makes the bag look fuller and more appealing)
13. Refrigerate product ready for delivery

II. SELLING

Now that you've got a grasp of growing your product, it's time to learn how to sell it effectively. This section is all about helping you get restaurant clients and helping you sell at the farmer's market.

A brief outline of the section is as follows:

A. MARKETING

1. Presentation
2. Fresh Sheet
3. Labels
4. Business Cards

B. RESTAURANTS

1. Overview
2. Materials
3. Restaurant Course

C. FARMER'S MARKETS

1. Applying to Farmer's Market
2. Farmer's Market Basics
3. Farmer's Market Course

A. MARKETING

Let every action you make define your business!

How you present yourself and your products will determine how people perceive you. Pretty simple. In this section, we'll show you how to present yourself and your products in a way that will get people to understand your values and commitment to excellence.

1. Presentation

How you display your crops speaks volumes about your entire operation. If the presentation of packaging appears disheveled and scattered, that is exactly what your clients will think your business looks like (and they're probably right). Conversely, when you deliver your greens in clean packaging with a well-designed label, your clients will know they can depend on you to provide them with the quality they are looking for.

Microgreens are a premium crop, and must be displayed as such. This is especially true for restaurants because they use them as a garnish that is meant to add plate appeal as much as it is to add complementary flavor. Do everything in your power to showcase the beauty of this veil of vegetables in your presentation of the greens in packaging.

Presentation techniques:

- Always make sure the greens are adequately dry before packaging
- Apply simple, beautiful labels (*see example*):
- Never allow greens to be smashed between the lid of the clamshells
- Orient the greens inline when packaging, whenever possible.

2. Fresh Sheet

A fresh sheet is a page describing who you are, what you're selling, and how much you sell it for. You'll primarily use these for restaurants, but you can also give them to interested customers at the farmer's market.

A note on the quality of your fresh sheet:

Microgreens are a premium crop, a beautiful fresh sheet will show the restaurants that you treat them as such. Give it a nice design, print it on a bit thicker paper, and you'll convey your values of quality when you hand them to prospective clients for the first time.

Things you must include in your fresh sheet:

- All the crops you grow and can grow
- Prices for each crop
- Business Name
- Contact information (name, phone number, address)

Things you should include in your fresh sheet:

- Product shots - High quality images of your Microgreens without anything else in the picture, preferably on a white background
- Shots of the greens in “action”

Restaurants - Pictures of your greens in use in other restaurant dishes. Once you get orders from chefs, ask them to send you photos of your greens in plates and make sure to tell them that you’re going to feature them on your website. You’ll be surprised how willing they are to help you out (and themselves).

Farmer’s Markets - Most people don’t know what Microgreens are, let alone how to eat them or what to eat them with. Make sure to take photos of them in sandwiches, salads, etc. Get creative here. Bring a handful of these fresh sheets to every farmer’s market. However, they cost a bit more to print, so don’t give them out to every customer, just the ones who express interest. If it’s beautiful enough, you’ll start hearing from your customers that they keep their “Nightlight Farm Fresh Sheet” up on the fridge for all their friends to see.

Check out my example fresh sheet on the following page.

NIGHTLIGHT FARMS

FRESH SHEET

Specialty Microgreens

SEPTEMBER 2012

INDIVIDUAL

Radish
Red Cabbage
Broccoli
Mustard
Cilantro
Beets
Pea Tendrils
Popcorn
Celery
Chard
Chervil
Cauliflower
Sunflower
Basil



OUR FRESH BULLS BLOOD & DAIKON RADISH

MIXES

Bread & Butter – Sunflower Shoots, Pea Shoots
Salad – Swiss Chard, Pac Choi, Radish and more
Spicy Mix – Daikon, Mustard, Argula
Herbal Mix – Celery, Basil, Chervil
Spicy Radish Mix – Daikon, Triton, China Rose

HOW IT WORKS

NightLight Farms provides unusual and heirloom varieties of microgreens, grown and harvested to-order. Choose to sample any of our varieties or mixes, and within 3 weeks we can deliver a custom order to your restaurant/store. Looking for something we don't currently offer? We are always experimenting with unique varieties and love the challenge of growing something new. Get in touch!

PRICING

All of our products are \$3. per Ounce
Minimum Order of \$48.

Call or Text - 415.705.9501

Luke@nightlightfarms.com

Luke Callahan
10 Cesar Chavez Blvd.
Portland, OR 97214



CHEF MICHAEL UHNAK
Besaw's, Portland

EDIBLE FLOWERS - coming soon!

NIGHTLIGHT FARMS

Specialty Microgreens



Simple label for packaging

3. Labels

These labels will accompany each package that you deliver to restaurants. Don't worry about putting them on bags to farmer's market customers. Because of the volume of packages going out there, it isn't a good use of time and labels. With that said, it doesn't hurt.

It should include the following:

- Your business name
- Your contact info: website, phone number, email
- A space for you to write in the name of the crop.
- The date the crop was harvested.

That's it!

I had a local sticker company print up 500 of them for about \$40.00. I slap them onto each container, write the name of the crop and the date harvested.

When I order more, I'll make sure to add my phone number and email address.



Labels filled out and ready to be applied

4. Business Cards

If you're anything like the quintessential starry-eyed entrepreneur, you've been dreaming up business cards as soon as you had the idea to start your own business. There's no need for me to tell you what your creation should look like. Let your creative mind go wild, and just make sure to include the following:

- Business Name
- Your name
- Your position (optional) - Do me a favor and refrain from putting CEO anywhere on your card. Best to wait until you have an employee for that.
- Phone number
- Email
- Address
- Website



An example of my business cards (front)



An example of my business cards (back)

B. RESTAURANTS

Restaurants can make a sizable chunk of your income selling Microgreens. There is a strategy to acquiring and keeping restaurant clients that will save you a lot of time and money. Outlined below is a good starting point.

1. Overview

Things to be aware of:

- There must be restaurants in your area that want Microgreens! Don't overlook this and blindly assume that any restaurant will want to use these small green things.
- Restaurant orders are often low \$25-75 per week. This means you'll have to manage a lot of clients.
- Restaurants are not always consistent. Because their own business fluctuates, they have a difficult time always wanting the same amount of produce each week.
- Restaurants shut down in the blink of an eye. It is a notoriously risky business venture to run a restaurant. This means that your best customer could be gone tomorrow! That said, be sure to have them pay their accounts in a timely manner!

Positives of Selling to Restaurants:

- You can sell your Microgreens for a higher price than in the farmer's market.
- You can make \$25-75 per restaurant per week. How many eligible restaurants are in your locale?
- Supplying to restaurants is great publicity
- Other income possibilities once you have a good network of chefs.
- You can sell to them year round

Principles necessary for successful restaurant models:

Persistence - I can't tell you the number of times I have met a chef once, never heard anything from him, assumed he didn't like the greens, then stopped in to say hi, and he ended up placing an order. It has been a great lesson in being persistent and going after what you want in life.

Thick skin - The restaurant industry breeds some large egos in chefs. Don't be put off when you're berated in front of his crew for any small thing. Also, don't be afraid to tell the chef you don't accept that and will not do business with them. You'll be glad you did.

Good relationship building skills - This is one of the pillars of success selling to restaurants. In order to make significant income, you'll need to know all the chefs in town and be known to them as the best Microgreens in town.

Consistency - This is key and speaks volumes about you as a person. Chefs are used to dealing with flaky, unreliable prep cooks all day long. The ones that rise to the top in their eyes, are the ones who do what they say they will do. Be consistent with the chefs, and in every other aspect of your life.

Which Restaurants to Target:

It'd sure be nice if I told you exactly which restaurants will buy your Microgreens wouldn't it? Tough luck kiddo. There will be no such hand-out. While I could probably tell you that steakhouses use 2# of micro radish mix weekly and tropical cuisines consume 4# of pea shoots and sunflower shoots bi-monthly, I'd be doing you a great disservice.

The fact is, every single restaurant in your area is a potential client of yours. The only way to know if a chef is or is not going to order from you is to meet with him (or her) face to face to talk to them.

So, get out there and start building relationships with all of the chefs in town. Who knows, you may just make some new friends.

2. Materials

What you must give to the chef:

- The fresh sheet
- A sample of your product
- Business card
- A couple good questions:
 - “Do you currently use Microgreens?”*
 - “What taste profiles are you looking for?”*
 - “What samples would you like me to bring you?”*
 - “Let me know if you want anything that’s not on this list and I’ll grow it for you.”*

What you want to leave with:

- The chef's phone number and email address
- A follow up time to bring another sample or deliver an order.
- A chef excited with the possibility of having fresh local, high quality Microgreens to experiment with

How the Interaction Works:

Tuesday, March 10

11:00 a.m.

Call the restaurant and make sure Chef John is available today between 2-4p. Don't ask to speak to him now, just tell the hostess to relay the message that you'll be coming in today to drop off some samples of Microgreens.

2:00 p.m.

- Arrive at the restaurant and ask the hostess if Chef John is available.
- Greet Chef John
- Ask if he uses Microgreens
- Here's a sample for you (open the package and encourage them to taste it)
- (As he's tasting it) "I grow and sell Microgreens here in Portland and deliver to restaurants Tuesdays and Fridays. Are you interested in any of these?" (Hand him the fresh sheet)
- Continue dialogue and ask above questions after chef expresses interest

2:20 p.m.

Proceed to next restaurant.

4:00 p.m.

Complete all sample delivering to chefs by now. After 4p, dinner prep is too busy.

Wednesday, March 11

Repeat same process as Tuesday.

C. FARMER'S MARKETS

You should absolutely sell your Microgreens at the local farmer's market. By selling sunflower, peas, and a radish mix, you can make \$200-\$300 per market per week. This is an excellent way to provide you with consistent income while meeting local community members. Soon, you'll come to love the farmer's market because of the connections you make there.

1. Applying to Farmer's Markets

The applications for Farmer's Markets generally open just after the days start getting longer in order to have all the stalls filled by the time they open in Spring. In the Northern Hemisphere, that means January! Scientists still haven't quite figured out when that is for the folks down under... But many speculate it to be early July. Don't miss this application window! Apply to all the farmer's markets in your area. The more the better. Microgreens take up such a small amount of space that you can easily produce for 4 markets. Ultimately, you should strive to sell at as many farmer's markets as you think you can.

The most important thing is to get your applications in before they close. Often times, there is much more demand for stalls than are

available. This means it can be incredibly difficult to get a stall after applications close.

You'll Need:

1. Application fee (ex. \$20-40)
2. Business Name (ex. Nightlight Farms)
3. Description of your business - a few sentences (ex. "We grow and sell Microgreens to restaurants, farmer's markets, and individual consumers in Portland Oregon.")
4. List of crops you'll sell (ex. Sunflower Shoots, Pea Shoots, Spicy Radish Mix)
5. Proof of Insurance & Policy Number (ex. Farmers Insurance, Policy #1234567890)

2. Farmer's Market Basics

If you've never sold anything at a farmer's market, it can actually be pretty intimidating. Fear not, once you have a grasp of the basics, you'll be selling your Microgreens with the best of them in no time.

The Space:

Usually, you'll have about 10' X 10' to work with. This is perfect to put up a pop tent, or just a table and stand if you want to keep it minimal.

Your Display:

The goal with this is to attract people into your stand. Focus on creating a visually appealing stand that would pique your interest while walking through a farmer's market.



“Pile it high and watch it fly”

This simple rule is the most important thing to remember when making an attractive display. Pile your products high. It creates the look and feel of abundance. It is far better than having one or two products in an empty basket. This little change can make the difference in you earning \$75 in a day and \$300. Trust me on this one.

Handling Cash:

The farmer's market deals in cash. This means you must be prepared. Set aside \$100 broken into smaller bills (primarily 1s, 5s, and 10s) to have on hand before each market. There is no exact layout of bills, but when in doubt, the smaller the better.

Also, do yourself a favor and price things in whole dollar amounts. There's nothing that slows a vendor down more than counting out 37 cents of change each transaction. Leave fractions for the mathemagicians.

Finally, if you have a smartphone and want to accept credit card, head on over to [Stripe.com](https://stripe.com) and have them send you a free card reader that plugs into your phone's headphone jack. Very few customers at the market try to use credit cards, but it never hurts to be prepared.

Your goal:

1. Attract Potential Customers to your Stand
2. Convert them to first time buyers
3. Convert first time buyers to repeat buyers
4. Convert Repeat Buyers to friends!

There you have it. You'll get better at the farmer's market with practice but these principles will get you off to a good start in the meantime.

III. ADMINISTRATION

I've seen many new ambitious entrepreneurs go cross-eyed when the subject of business administration comes up. Fear not, this subject is quite easy, once we break it down into 5 manageable parts.

They are as follows:

A. REGISTER YOUR BUSINESS

B. BANK ACCOUNT

C. LIABILITY INSURANCE

D. TAXES

E. ACCOUNTING OPTIONS

A. REGISTER YOUR BUSINESS

There are a couple routes you can go when registering your business. There is a mountain of information out there about it and I am certainly no expert. With that said, below is a very brief breakdown of two of the most common options:

1. Sole Proprietor (Easiest) - You and the business are one and the same. This means if you ever get sued and lose, the plaintiff may have access to your personal assets like your house, your car, and even your middle child! Just kidding on the last one. But not the middle one...

2. Limited Liability Corporation - LLC (Least Liability) - This takes a bit more work to setup and maintain, but is an independent corporation that is entirely separate from your personal assets. You become an employee of the corporation. This is the route I chose for Nightlight Farms. Here in Oregon, it cost \$100 and was relatively straightforward. I made the mistake of not listing myself as a member of the corporation which caused a bit of headache and filing an addendum to my initial paperwork and even a small fee. Learn from me and make sure to list yourself as a member of the corporation. If you have any doubts when filing, you can call the state office and they are usually quite helpful.

Get an EIN

Whether you choose to be a sole proprietor, create an LLC, or go another route, you can (and may be required to) get an EIN. This is basically a social security number for your business that the IRS can use to track your taxes.

You'll be required to have one if you do anything but a sole proprietorship, but getting an EIN is a good idea even if you stay as a sole proprietor.

You can get one here in a few minutes, just make sure you know which entity you're going to create because they will ask you. And, yes this is the 21st century, but somehow our government has put business hours on a website... so you'll have to apply M-F 7a-10p EST.

Get an EIN from the Internal Revenue Service (IRS)

Additional Resources

Here are some links that you should read to help you determine what the right option is for you:

Choose between Sole Proprietor and LLC

<http://www.nolo.com/legal-encyclopedia/sole-proprietorships-vs-llcs.html>

How to Start a Sole Proprietorship

How to establish a sole proprietorship

How to Start an LLC

How to establish an LLC

Local Government Small Business Resources

Your local government probably has some good resources to help you with this. Try Googling something like this: "Portland government small business resources"

B. BANK ACCOUNT

Keep Business, Business!

Regardless of which entity you formed (sole proprietor, LLC, etc.) your business needs a dedicated business account. You need a debit card and check book to make all your purchases with. This will make your accounting life so much easier. Trust me on this one.

Choose a Credit Union:

There are a few reasons why you should choose to do all of your banking with a local credit union and they are as follows:

- It's local
- Low to no minimum balance requirements - This is huge
- Lower fees on banking products
- Lower interest rates

Make an Initial Deposit:

When you open your account you'll need to make an initial deposit. Often times it can be as low as \$100. My advice is to put more in there. The idea is to put enough money in the account to cover your expenses for the first 3 months into it. For the case with Microgreens, you'll start with \$3,000 and that should more than cover it. This will make your accounting life much, much easier. Trust me on this one.

C. LIABILITY INSURANCE

Insurance. Yup. People (esp. Americans) love to sue. Insurance is a leech industry that provides very little positive impact on society and something that I would like to see disappear but is a reality and must be dealt with accordingly.

How much it will cost:

You will probably pay somewhere between \$25 - 75 per month for liability insurance.

How to get it:

Use NetQuote to compare business insurance prices and get the best deal. I've found it to be pretty reliable. Check the prices, and as usual, if you find a better deal, go for that.

Compare:

Follow up with each of them, give them the rest of the information they require and build a simple spreadsheet comparing rates. Now, choose one, pay them, file their information in case you ever need it and move on to more important things.

Compare insurance Prices using NetQuote.com

D. TAXES

Pay them quarterly, Uncle Sam will be glad you did!

Oooph! I know lots and lots of entrepreneurs who have been burned by taxes at one point or another in their business. Taxes can be detrimental to your cash flow if you wait to pay them in one annual lump sum. Don't go down the path of so many others. Learn from their mistakes and pay your taxes quarterly!

You can Google "How to Pay Quarterly Taxes" to learn more.

E. ACCOUNTING OPTIONS

This is often the most neglected area of a new business, and plenty have failed because of it. Do yourself a favor and spend some time becoming fluent with accounting methods. Once you have learned your system of choice, create your own habit of diligently entering the data and keeping up with the books. The more you watch the numbers, the more profitable your business will become. I guarantee it.

Quickbooks (recommended):

This is the most versatile, advanced system. I didn't start with Quickbooks but wish I had. Now I use it religiously.

Wave Accounting (free):

I started with Wave Accounting and it could probably work for you,

but I moved away from it (and to Quickbooks) because it didn't track my bank transactions as competently as I would have liked.

Either way, it's free.

Spreadsheets:

Good ol' Excel, Pages, or what have you. You can certainly do it all through spreadsheets if you put in some time initially and set up your books exactly as you want them.

IV. FINANCES

The numbers. Consider this the entire reason for doing business. Young entrepreneurs will argue this point 'til the cows come home, but will be converted within a year or two. Without a firm grasp of how your business consumes and creates money, you can't know for sure where the work needs to be done.

In this section we'll cover the basics of the most important aspect of your business. The finances.

- A. MEASURE EVERYTHING**
- B. TRACKING INCOME**
- C. EXPENSES**
- D. PROFIT**

A. MEASURE EVERYTHING

The profitability of your business is dictated entirely by your diligence in tracking every number in and out of your business.

I cannot stress the importance of this enough.



Learn from Luke:

When I first started out, I was growing and selling Bull's Blood (a type of Beet) to restaurants. After a few months, I decided to determine how much seed each tray uses, how much it costs, how much I sell the finished product for, etc. I found some incredibly alarming information... I was actually losing money selling Bull's Blood! I was literally losing money with each tray I planted. I couldn't believe it! It was at this point that I realized just how important it is to track every number in your business (and in your life) to determine what's working and what isn't!

Learn from me on this. Measure everything! (And don't sell Bull's Blood.) There are alternatives...

B. TRACKING INCOME

We've included template spreadsheets to help you get started tracking everything. You will invariably want to customize them to your own needs, and feel free to do so. These will just give you a push in the right direction.

Below are the figures that you must track:

- Farmer's Market:
- Date
- Cash on Hand Beginning
- Cash on Hand End
- Credit Card purchases (if you allow that)
- Revenue
- Inventory - Beginning (for each crop)
- Inventory - End (for each crop)

Restaurants:

- Date
- Restaurant
- Amount
- Crops
- Price per oz.
- Amount (in oz.)

Tracking Payments from Restaurants

This is one aspect that was initially difficult for me. In fact, for a while I never tracked who paid what. Needless to say, it created a huge headache when I decided to find out who hadn't been paying their

bills! Take a lesson from me and get started on the right foot with a system that you'll use every time.

Here's my process with restaurants:

- Deliver greens
- Send invoice through accounting software (via email)
- Receive check in mail (weekly)
- Mark specific invoice as Paid in accounting software

Simple right? It is, but the last, most crucial step can get missed if you have a pile of checks that need to be cashed and you're tired of doing the desk work. Be disciplined and always mark who paid.

C. EXPENSES

Just like your subtle latté habit, small purchases can add up to make a significant drain in your income. It is of utmost importance to identify each expense going out down to the smallest minutia, then categorize it and analyze it!

Once you can see where the bulk of your money is going, you will instantly start problem solving and coming up with solutions to help you save money on expenses and put more money in your pocket.

Again, the Steps to Tracking your Expenses:

1. **Identify all expenses** - I like to put all expenses on my Nightlight Farms debit card. Then Quickbooks identifies each purchase.
2. **Categorize all expenses** - Sophisticated accounting software like Quickbooks will learn which expenses belong in each category (after you manually tell it a few times).
3. **Analyze your largest expenses** - Again, this is something that took me some time to intentionally sit down and look at. Once I did, I could see exactly where the big expenses were and creatively come up with solutions to cut them down.

D. PROFIT

Out of the red and into the black!

It takes time to start making a profit with your business. Be patient.

When I first started, I hit the ground running. I made it my goal to get to 20 new restaurants each week. It wasn't long before I had 5 clients with recurring weekly orders. It was actually a pretty hectic time because I didn't have time to figure it out for myself (with the help of a few good friends) how it all worked. Within 8 weeks I had recouped my initial investment and started turning a profit and that was just in restaurant sales. If I had been selling in a farmer's markets (or 4!) I could have turned in a profit within the month!

Regardless of how long it takes you, don't worry, take your time and do things well. It's far more important to under-promise and over-deliver than to get in over your head and not be able to do what you say you will.

Well, there you have it. The quick start Microgreens business. I can almost guarantee that after successfully running your own Microgreen business, you'll want to start growing other crops. In fact, you'll start seeing money making opportunities everywhere you look. You'll realize that you are surrounded by opportunity and all you need to do is open yourself to the good things that come.

Enjoy the process of building this business. Don't stress too much. You'll look back on this achievement and be incredibly proud of yourself.

Also, keep the community here at Local Business Plans posted on your progress. We're all rooting for you!

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