

" 4 Myths Of Worm Composting " Steven Churchill

* FULL TRANSCRIPT *

Hosted By Marjory Wildcraft www.TheGrowNetwork.com

NOTICE

You do not have the right to reprint or resell this transcript.

You may not give away, sell, or share the content herein.

© Copyright 2020 TGN Creative Holdings LLC

ALL RIGHTS RESERVED. No part of this report may be reproduced or transmitted in any form whatsoever, electronic, or mechanical, including photocopying, recording, or by any informational storage or retrieval system without the express written, dated, and signed permission from the author.

presented herein represents the view of the author as of the date of publication. The author reserves the right to alter and update his/her views for any reason and at any time. This report is for study and discussion purposes only. While every attempt has been made to verify the information provided in this report, neither the author nor his affiliates/partners assume any responsibility for errors, inaccuracies, or omissions. Any slights of people or organizations are unintentional. If advice concerning legal or related matters is needed, the services of a fully qualified professional should be sought. This report is not intended for use as a source of legal or accounting advice. You should be aware of any laws that govern business transactions or other business practices in your country and state.



Home Grown Food Summit

Transcript – Steven Churchill - 4 Myths Of Worm Composting

Hello and welcome to the Home Grown Food Summit. This is Marjory Wildcraft. I'm your host. I'm the Founder of The Grow Network, which is the premier community of people who are stopping the destruction of the earth via home grown food on every table. I am so excited about our next presentation. Worm composting is the best. I mean, worm compost is amazing for your gardens, and then making worm compost tea. No, don't drink it. I mean, just the growth rates are phenomenal, and the health and vibrancy of your plants are amazing, and not only is this my experience and experience of many gardeners. I spent some time with Dr. Elaine Ingham, who is a soil microbiology goddess, and no, really, she's like looking at it under the microscope, and quantifying it, and like by hands down, worm compost is the best.

Our next presenter is pretty awesome dude. Like really, I was really, really pleased to see this presentation come in. This is Steve Churchill, and he began vermicomposting at the hobby level in 2011. He was like, "Wow, you know, I really would like to create the same kind of instructions on how to make a worm bin and how to use worms that I would have liked when I was a brand newbie," and so he started the Urban Worm Company in 2014. In 2018, he launched the Urban Worm Bag, which is a fabric worm bin, designed to maintain aerobic conditions. He's a speaker in a lot of places, North Carolina State Vermiculture Conference. He's the Director of Marketing for Michigan SoilWorks. His day job is he's a First Officer for Southwest Airlines. I'm like, "I almost think I recognize him." I used to fly a lot. He's also serving his 21st year as a Pilot in the Pennsylvania Air National Guard. Steve says that he has a very patient wife of 11 years, who somehow hasn't divorced him yet, and they live with their two young children outside of Philadelphia. What amazing. This is a really, really well-done presentation. There's also how to make a worm bin in here, the four myths. I've been worm composting for a long time, and I really picked some stuff up. I do have to say Steve presents very clearly and very succinctly. I think you're going to really enjoy this presentation.

Hey, guys. This is Steve from the Urban Worm Company, and I am thrilled to be here talking with you today. I want to thank the folks at the Home Medicine Summit and The Grow Network for inviting me on. I'm excited about our topic, and I can't wait to get into it. As most of you know, worm composting or vermicomposting is an excellent way to reduce our impact on the waste stream, but also help create an awesome organic soil amendment that we call worm castings or vermicompost.

They're really kind of separate things, but for the purposes of today, let's just consider those two items interchangeable. There is a lot of good information already out there. Some of it's already on The Grow Network, that is going to teach you the basics of vermicomposting. We're going to go over a little bit of that today, but the main point of today's presentation is to clear up four main misconceptions that people have about worm composting and worms. These misconceptions are not necessarily harmless. They actually are impeding the success most people are having with worm composting, and so I'm going to clear those things up today. We'll get you off on the right foot with worm composting. If you're already familiar with worm composting, some of this stuff may be a little bit repetitive, but it should help you give some food for thought for how you are running your worm bins and your worm composting going forward, so let's get into it. Let's cover some of the basics of vermicomposting.

Let's just start with the definition first. Vermicomposting is the consumption of organic waste by an ecosystem of microorganisms and earthworms to create a humus-like or a humus-rich substance called vermicompost. Now, it's really important that we consider the microbes in all of this, because what really happens in a worm bin, it's not like you're just putting food waste into a worm bin, and then the worms eat it. It's actually, there's a couple things that go on

before that. What happens is this organic waste gets in there. By organic waste, I mean food waste, and paper waste, cardboard, stuff like that. There are microorganisms that start growing on it and start that decomposition.

What they effectively do is really prepare that waste for consumption by the worms, because worms have these tiny, little mouths. They will kind of start eating that organic waste, but what they really need is for the bacteria and the fungi, the bacteria mostly at first, to begin breaking down that organic waste to make it basically edible for worms, so you have this kind of a virtuous cycle of microorganisms and earthworms that are both consuming the organic waste. Again, it starts with the microbes, they begin to start decomposing that waste, the earthworms come in, start eating the microbes and the food, and then it produces this microbially active substance at the end called vermicompost. Let's talk about some of the benefits of vermicompost when it comes to your soil and your plants. First, for the soil, vermicompost adds to the water retention capacity of your soil. It aids in the aggregation of the soil particulates within your soil that creates those little pore spaces that are going to hold water. When it comes to the soil structure and water retention capabilities, adding vermicompost, just like compost, to be honest with you, to your soil is going to aid in your soil's ability to hold water, but because vermicompost is so microbially active and so full of life, and so full of other organic matter that actually has not yet necessarily been consumed by the worms, we are adding organic matter to the soil, and just a little bit of that can actually have a very outsized effect on your soil's capability to produce life. Now, as for the plants, it has some awesome effects too. In plants that have been grown in vermicompost, we see the following. We see faster germination, we see better and stronger root growth, we see more yield when it comes to the fruits that that plant creates, we see better pathogen suppression, we see better pest suppression, and one really cool thing that scientists are finding out is that bees and other pollinators are pollinating plants much more effectively if they are grown in soils that have been amended with vermicompost.

The pollinators not only discover the plants more quickly, but they visit more often and they stay for a longer time period. I find this stuff so fascinating. I'm not a soil scientist, I'm hardly even a gardener, but what I would do if I were you is to back up these claims that I'm making today, is I would go to Google Scholar and type in vermicompost effects on plants, and you're going to come up with, I want to say there's something like 43,000 peer-reviewed studies that are published there, and that will give some sort of scientific backup to some of the claims that I'm making here today. Even if for some reason you're not a gardener, you're not interested in growing your own food, there is a huge benefit in vermicomposting. Our heaviest waste that we create in a household is food waste, and that's because of its high water content. I would say I think it's roughly 40 to 60% of the weight of the waste that we send away to the landfill is going to be our own food waste. It would be far better off that we recycle this in place, in our own homes, in our own garages or basements than it is to send it off to the landfill. Firstly, we have carbon-guzzling trucks that are going to take it to the landfill, but then, once it gets to the landfill, food waste is going to rot and emit methane gas, which traps 84 times the heat of the CO2 that we burnt to get it to the landfill. Just imagine what we could do if we had this wellspring of people in this country and on this earth, that we're able to recycle their food waste at home and not send it away, send it away where it's going to rot and emit methane. That would be an incredible benefit. Again, you don't even have to garden to see the benefit of vermicomposting. One thing we should talk about before we go on is the difference between composting and vermicomposting. It's actually a little bit unfortunate that the word composting is included in vermicomposting because I think it can send the wrong signal to people. The two processes are actually very different. One of the first differences is temperature.

Composting is typically a hot process with temperatures that can reach over 130 on up to 160 to 170 degrees. Vermicomposting operates at much lower temperatures. Basically, if you think of the temperature where you would be comfortable, anywhere from say 55 to 90 degrees, that is the temperature where you want to be doing your vermicomposting. You don't want the worms to freeze or anything like that when you get below freezing, but you also can't cook them by putting them into 120, 130-degree compost piles, so there's differences in temperature. There's differences also in the microbes that are active in each of the different processes. For composting, you have thermophilic, heat-loving microbes that thrive and multiply in hot conditions, and they actually create the hot conditions. With vermicomposting, you have mesophilic microbes that operate at those lower temperature, so you have a much different microprofile between composting and vermicomposting. Composting is dependent upon volume. We

Contact Us: Happiness@TheGrowNetwork.com

want to build these sort of large piles for the most part. There are some composters that don't necessarily need that, but if you are doing backyard composting, you want to create a large pile with a lot of volume that's going to help trap that heat and get you that large mass of material that is going to heat up and allow those thermophilic microbes to do their thing. You actually don't want to be trapping any heat when it comes to vermicomposting because it is actually a surface area dependent process, so you never actually build up that mass that traps the heat that you get with composting. Earthworms actually only inhabit the top six to eight inches of whatever habitat that they're in. I'm talking composting earthworms. You will find them lower, but for the most part, they hang out right near the surface. Because of that, we need to worry more about surface area than we do about volume and depth.

That's another difference. Another difference is the amount of time it takes to go from your raw organic waste to a finished product. Composting is a longer process. It takes anywhere from up to six to nine months to go through the four stages of composting, which are the mesophilic, the thermophilic, which is the hot process, the cooling, and then the curing. With vermicomposting, it is a much quicker process. You can basically take a unit of organic waste that you might have otherwise composted, and you can turn that into vermicompost within eight to 12 weeks, so vermicomposting is typically faster. I will say though, that even though I'm a worm guy, if you are looking at just the waste mitigation aspects of each of the two processes, composting is going to process more organic waste for you than vermicomposting will, and typically, that has to do with that surface area problem. A lot of people have a fair amount of volume, but they don't have a ton of surface area, especially when it comes to space-restricted kinds of places in urban environments, or indoors for that matter. Anyway, I hope that that was helpful. Let's move on to the next topic, which is how to start and maintain a home worm bin.

Now, worm bins come in all shapes and sizes. You can have a small-scale home worm bin that can really only process a couple ounces at a time to these large, continuous flow worm bins that are excellent at producing large amounts of waste. For the purposes of today though, I think we should kind of talk about the small-scale worm bins and what your options are. There are a lot of different ones out there that you can buy. One of the more popular ones that we have here in the United States is the Worm Factory. It is a stackable worm bin with, basically have these trays that have these perforations or these holes in the bottom where the worms in theory can ... After they're done processing one tray, can move up into trays of fresher waste. That is one of the more popular worm bins out there. You've got the Hungry Bin, which is a larger kind of continuous flow worm bin. Then, you have my bin, which is the Urban Worm Bag. It's been around for a couple years now. I've loved the feedback that I've gotten on it, but if you really want to just use the resources that you may already have in your home, you can start with something as simple as a Rubbermaid bin. What you're going to do is you're going to take this just simple Rubbermaid bin, and you are going to drill holes in the side of it in order to allow for airflow to enter that worm bin. Once you've done that, you want to add a layer of about six inches of a carbon-rich material like a paper or cardboard. For a starter material, I actually like coconut coir.

You have to buy it, but it actually has a nice soil-like texture that the worms like. Some people use peat moss, although there are concerns about the sustainability of peat. You could use finished compost, basically something that the worms are going to like being in, and not try to leave your worm bin immediately. The best thing to do is actually be diverse with it and kind of mix several of these things together to increase your chances of success. Once you have your bedding there, you want to make sure that it is moist, but not wet. What you're looking for is about a 70% moisture content. Now, you may be wondering, "How in the heck can I tell what 70% is?" I understand. What you would do is you would grab a handful of that bedding, clinch it in your hand very tightly, and if it yields about one drop of water, then you know you're right around that 70%. Again, you want it moist, but you don't want it sopping wet. From there, what I would recommend doing is placing a small amount of organic waste, something as small as a banana peel or an apple core. You're going to put it in a bin, and you're just going to let it sit there. Now, understand, we have not even talked about putting worms in your bin just yet. This is, we're just with bedding and a little bit of organic waste. What we're trying to do is grow the micropopulation that I talked about in part one, which is where you've got these microbes that are going to be sort of beginning to thrive in that environment.

What that small bit of organic waste that apple core, the banana peel does is it provides a food for those microbes to begin eating, to begin multiplying, and to begin actually tearing down that food waste. Once that's in there for a few days to up to, I'd say if you could do it two weeks, that would be good too, then your bin becomes ready to receive earthworms, and you want to order just one of the few different kinds of worms. You don't want to use the worms that are in your soil. You want to order composting worms, which you're normally only going to find ... At least if you want species purity, you're going to need to order them online. I would stick with one of two different species. The first one is a red wiggler, which is also called Eisenia fetida. That's its binomial name or scientific name. The other one is a European nightcrawler. It is not actually a nightcrawler, but it is a larger cousin of the Eisenia fetida. It's actually called the Eisenia hortensis.

Again, larger cousin of the red wiggler. For a Rubbermaid bin or something like this, you probably don't need to start with anything more than just about a pound of these worms, so go with the red wigglers. Go with the European nightcrawlers. When you get them in the mail, go ahead and just pop them in your bin, stick the lid on, or if you're worried about the worms escaping, one thing to do is to place a bright light above your worm bin for the first night. What that does is it sort of forces the worms down into your bedding and sort of forces them to get acclimated to their new surroundings. It's very usual for worms to kind of want to try to leave their surroundings if you have just changed their habitat, but because worms find light to be repellent, they are actually going to choose to go down into the bedding rather than try to escape and go wander off to who knows where. Once you are pretty sure that you've got a happy group of worms in your worm bin, I think it's time to start feeding, and you want to start feeding very small amounts. A worm bin is sort of like a crock-pot in a way. You've got the various different pieces of organic waste in there that maybe haven't really started breaking down just yet, but what you want to do is you want to allow those microbes and that organic waste to begin interacting, and you find that it's ... This takes a while. It takes several weeks to even a couple months, is that you'll find that the organic waste that you put in your worm bin starts breaking down faster the farther you go.

This is a function of the microbes that are in there. It's a function of the amount of earthworms that have been reproducing and can now process more waste, but the key is, is to start slow. Don't just add a whole bunch of food waste in there and expect the worms to start destroying it. That is not going to happen. You want to start with, literally for a bin this size, start with just a few cups per week. See how the worms are processing it. If you notice that the top of the worm bin looks very flat and almost fuzzy like the top of a pool table, then that's a good sign that you are very safe to start feeding again. Again, start slow. You want to feed in thin layers, and you want to keep adding bedding to your worm bin as you are adding food, and that's going to be one of the things that we talk about in part four. This is a very organic process. You need a little bit of patience. You need some green thumb. You need some intuition actually to know when things are going well in your worm bin and when they're not. I will say that if things are smelling bad in your worm bin, things are not going well, and you are likely overfeeding, so if you smell something rotten, stop feeding. Possibly even take out the things that are producing that offensive smell, and just let things settle out for a while.

Even give it up to a week or two, and then maybe start feeding again, but the key is patience. The key is to start slow, and then you'll be off to the races and things should be good moving forward. I consider starting a worm bin sort of like starting a fire. It's actually much more difficult to start a fire than it is to keep on going. The same goes for your worm bin. Once you do that, then really, it's a matter of, again, adding your food waste in somewhat thin layers and maintaining your temperature, your moisture, and the pH in the worm bin. As far as moisture goes, it's helpful to know that your food waste is very high in water. Typically, it's going to be 80 to 90% water. You don't want to just be adding food waste to your worm bin. You want to keep adding bedding because that bedding is actually going to help drop that overall moisture content in your worm bin down towards that 70%, which is where you want to be. If you get a worm bin that is too wet, what happens is that excess moisture starts occupying the space where air used to occupy. The microbes that are in your worm bin are actually going to consume the oxygen that are in those pore spaces that now have your excess moisture in them. They're going to consume the oxygen, but the bin is not going to be able to replace the oxygen down there in those wet areas, and you end up with an anaerobic or a stinky bin. You won't want that, so

maintain your moisture right around that 70%. You also want to maintain your temperature between about 55 to 90 degrees inside your bin.

Now, a lot of people worry about how they are going to be able to keep their bins cool or warm enough, depending on what season they're in. I will say that the larger the worm bin you have, the easier it is going to be to keep it warm inside or to keep it cool. If you have to have your bin outside, make sure that it is protected from direct sunlight and direct precipitation. If it can be near your house or kind of on your house, that would be great, but really, when it comes down to it, you want to have your worm bin inside your house or inside some sort of a climate-controlled structure where you can make sure that the inside of the bin stays between that 55 to 90-degree range. The other thing to watch out for, and this is really kind of more a secondary concern is the pH. Vermicomposting should be a pH neutral, sort of endeavor for you. Maybe possibly slightly acidic. Really, the only way to get your pH really far out of whack is to add a lot of, kind of acid-heavy foods like citrus, or blueberries, or something like that to your bin without adding that bedding as well. pH is really not a difficult one to control, but you want to make sure that you keep your moisture and your temperature under control, and that's going to kind of help everything as you move forward. Again, there is a ton of great information online.

You can go to urbanwormcompany.com, and I've got plenty of resources for the new vermicomposter. I hope that this has at least refreshed you a little bit on how to start and maintain a worm bin. Now, I want to get onto the meat of the presentation, which is clearing up four big misconceptions that people have about worm composting and worms, so here we go. I started the Urban Worm Company in 2014 to help new vermicomposters get off on the right foot with vermicomposting. Over the past few years, I have answered thousands of emails from readers. Many of whom have some really wrong impressions about vermicomposting. These impressions and these misconceptions come from the internet for the most part. It comes from somebody reading something somewhere, posting it on social media, and then all of a sudden, it becomes fact. Well, these facts are not actually facts, okay, and in fact, they are mistruths in many respects. What we're going to talk about here in this section is essentially a microcosm of a lot of the things I felt I needed to clear up with the people that emailed me looking for advice.

The first of these myths is that the juice that drains out of the bottom of a worm bin is worm tea. That is not the truth. It is not worm tea, it is not worm wee, or worm pee. It is leachate. What leachate is, is just excess moisture that has ... As your food waste decomposes, it's that excess moisture that seeps down through your vermicompost and collects at the bottom of the bin. Now, if you notice, there's some of those stacking worm bin type of bins like the Worm Factory 360 or the VermiHut. Those often have a tap at the bottom that allow you to drain that excess moisture out of the bottom of your bin. What comes out of the bottom of the bin is not worm tea. That is leachate again. The problem with those taps is that they are actually there to save you from your own mistakes, but some people see them as encouragement that they should be producing a wet-enough vermicompost where their bin is producing leachate. Now, leachate is not necessarily bad. I am not of the mindset that the stuff you get out of the bottom of those bins is harmful, but the thing is, is you don't know that leachate could have been sitting in the bottom of your worm bin and basically, culturing pathogens and you would never know it, so if you blindly took it out of the bottom of your bin, you could kill your plants with it, so I would not even use it. I would throw it out. I certainly would not use it on any edible plants because you just don't know.

Worm tea however, is a deliberately-produced extract that ... There's a few different ways that you can make it. The most simple way is to take a five-gallon bucket, add water. You might want to let the water actually off-gas any of the chlorine that you may have in that water for 36 to 48 hours. You could take a very small amount of vermicompost. Stick it in a very tightly meshed bag. You can buy these online. They have these very like, these high micron mesh bags that are compost tea bags is what they are. You suspend it in the water, you take that water, and you agitate it for 36 hours or so. An aquarium bubbler is an excellent way to do this. What that produces is actually a tea, and it's a microbially active tea that you can then use on your plants. What you get out of the bottom of a wet worm bin is not tea. That is leachate. The next misconception is that bedding is separate from food in a worm bin. I kind of understand

why this happens, because with other animals, whether it's reptiles, or chickens, or hamsters, or whatever rodents that you've got in your house, bedding is separate from food.

In a worm bin, worms eat the bedding, so the bedding is actually just a different form of food. The reason why this is important is that a lot of people do a great job starting their worm bin with bedding, and then after that, they only add food waste. This creates several different problems. First one is excess moisture. We talked about the water content of most fruit and vegetable waste, which is around 80 to up to 90 to 93%, if not, even higher for things like watermelons and cantaloupes. What happens is you keep adding that food waste in without adding that bedding to help sop up that excess moisture, and you just keep increasing the water content of your bin, and it creates that leachate and the anaerobic conditions. We do not want this, so you want to make sure that you are adding bedding frequently, and I would say add it every maybe other time that you feed, or that you put actual food waste in your bin. I would make sure that you're adding bedding as well. The other thing that bedding does is it helps keep your carbon-to-nitrogen ratio really high. One of the differences between composting and vermicomposting that I did not cover before is the carbon-to-nitrogen ratio.

You've got your browns and your greens that we're used to talking about with composting, so you've got your leaves, which are your browns and you've got your greens, which is your food waste or coffee grounds or something like that. A worm bin is the same thing. Your bedding is your browns and your food waste are your greens. You want to keep the bedding levels really high to keep the carbon level really high, so you prevent any hot composting from going on in your worm bin. If all you're doing is adding nitrogen-rich food waste, you can actually find yourself in a position where you are actually propagating hot composting, and we do not want that to happen, so keep adding lots of bedding. I tell people you literally cannot have too much bedding in a worm bin. That may not be the case in all circumstances, but you will be far better off with too much bedding than you will be with too little, so keep in mind that bedding is another form of a food. It's just a food that breaks down slowly. This is going to help you keep those moisture levels under control like we talked about with the worm tea not being leachate situation, so keep that in mind. Number three, and this is a big one, you're going to hear this a lot and you're going to see it a lot online, is that worms can eat 100% of their weight every day.

This is not true. The most experienced vermicomposters that I talk to estimate that their worms are going to eat between 25 to 33% of their weight each day. Now, granted that's an estimation, but that is a long way from 100%, so do not, because you just got a pound of worms, think that you can feed a pound of food waste blindly daily. In fact, I would get away from any sort of set rules about how much you feed your worms every day. If your worm bin is stinky, do not feed anymore. I guarantee you that if you start out with a pound of worms and feed a pound of food waste every day, that you are going to end up with a stinky bin. We talked about what leachate does. It displaces all the pore space. It creates anaerobic conditions. The other thing too that the excess moisture by overfeeding will do is, especially if you have one of those stackable worm bins, where you hope that the worms keep moving up into the layers of fresher waste above, they are actually not going to do that.

If you're adding all that food waste in these top trays, thinking that the worms are going to come up and eat that food, what happens is that water makes its way down into the trays below, and the worms are perfectly happy to hang out where it's very moist. They don't want anaerobic conditions, but they do like moist conditions. By overfeeding because you're adhering to some sort of ratio like 100% of worm weight, or even 50% of worm weight, you're going to create conditions in your worm bin that are less than optimal. You're also going to make it very difficult to ever harvest your worm castings, because if the worms never leave where they're supposed to and never keep climbing into those areas of fresher food waste because they're happy where it's wet, well, you're going to have a tough time ever separating the worms from your worm castings, so don't ... Let's just get away from the idea that worms are going to eat 100% of their weight every day. In fact, don't even think about that in terms of any sort of ratio. What I would prefer that you do is look inside your worm bin, smell it, see how it's going. Look at actually the surface of the bin, and you'll be able to tell that the worms have actually consumed most of the food waste in there. That's your point to start feeding more. It's not going to be blindly following some set ratio like that.

The first three things that we talked about dealt with things that go on inside your worm bin and the worm composting process, and really kind of dealt with the moisture that we're trying to manage inside the worm bin. This fourth myth is completely different but no less important, and that myth is that worms create good soil. I take phone calls and emails from people who want to buy composting earthworms, throw them in their garden, and expect them to do wonderful things to their soil. There are two main reasons why this does not work, especially when it comes to composting earthworms. There are three classifications of earthworms. There are anecic, endogeic and epigeic. Anecic are deep vertically burrowing worms like nightcrawlers. They will burrow down six to nine feet below the surface. The endogeic are vertical burrowers that live really more in topsoil. Then, there's the epigeic, which live on the surface.

These are your composting worms. These are worms that basically live above the soil, but below other matter like the leaves that are spread out on the forest floor or manure, basically lightly-packed material that is above the soil. If you were to take composting worms and throw them into your garden, they would not be able to burrow and aerate the soil like you were expecting. They will also not be able to protect themselves against predators like birds and other things that would be very happy to see you throw a pound of meat into your garden, so don't do that, especially when it comes to composting worms. I wouldn't do it with regular, common earthworms either, and here's why. Worms are attracted to good soil, so they are a symptom of good soil, not the cause of it. Worms are attracted to organic matter, that is in soil, and if you looked at the definition of bad soil versus good soil, much of the difference is going to be the organic matter within that soil that can sustain life, so these worms can do wonderful things for us. It sounds like sacrilege to say as a worm guy, that worms don't create good soil, but it's the truth. They can only thrive in an environment that can support them, and that environment has to have organic matter, so do not take these worms and throw them into your soil and expect them to do wonders. They will likely leave for better areas, or they will die.

I like to say if you build it, they will come, as in if you build good soil, you will attract earthworms. The other thing is my compost brings all the worms to the yard, and that's a little bit of another pop culture reference, but it's really the truth, is that if you can amend your soil in your garden with a compost or manure or something like that that is an organic material, organic matter or something rich in that organic matter, you are going to improve your soil and you are going to attract worms from all around. Just remember that worms are a symptom and not a cause of good soil. That is actually going to be effective for you as you consider how to better the conditions in your garden. Remember, don't throw the worms in there, but throw your vermicompost in there when you're done with it. That would be a wonderful way to amend your soil and bring worms from other areas into your garden. Guys, thank you very much for listening today. I hope that you got a lot out of this. Again, the four misconceptions were kind of the meat of this, and I hope that I was able to kind of set you on the right path towards your worm composting success. Thank you so much for listening.

Feel free to email me. It's steve@urbanwormcompany.com with any of your questions that you have moving forward. Thank you for being interested in worm composting. Thank you for watching, and I hope to hear from you soon. Take care. Okay, guys. Thank you so much for watching. I would love for you to head over to urbanwormcompany.com/grow. That is a page I've created just for Grow Network viewers. I've got a few goodies over there for you to include some discounts that I don't offer anywhere else, so thank you for your attention today. Enjoy the rest of the Home Medicine Summit, and I will talk to you soon. Take care.

Marjory Wildcraft: Well, that's awesome. That was Steve Churchill. You know, I have not tried his worm bag yet, so I'm actually going to go pick one up and give that a try. That looks like a really fascinating way to go. I have done most of the ones that he presented there with the bins, and also with the stackable ones, the Worm Farm 360, and you know, I love playing around with stuff. Anyway, click on that button to the right. Steve has a bunch more stuff for you. I know he's got a special bag, a special purchase prices with discounts for Grow Network community members, and he's ... Gosh, I was just realizing that he's been talking about the Home Medicine Summit the whole time, and this is actually the Home Grown Food Summit, but ... A little typo on his presentation. Anyway, click on that button to the right, and that'll get you in touch with Steve. As you can see, he's got a lot of really clear, direct information, will be able to help you get started, and you really do want to get started. Growing worms are, it's an amazing, amazing thing for your soil. Then, of course, down below that, you can own this presentation and all the presentations at the Home Grown Food Summit here by

clicking on that button down below, and that supports the work of bringing this to you, and yeah, and it just keeps the mission of The Grow Network alive and well, and we really are here to stop the destruction of the earth via home grow food.	
Contact Us: Hannings @The Grow Network con	m