



**“Free Chicken Feed: 3 DIY Systems for
Growing Insects For Your Girls”**

Anne-Marie “Dash” Miller

FULL TRANSCRIPT

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“Free Chicken Feed: 3 DIY Systems for Growing Insects For Your Girls”

Anne-Marie “Dash” Miller

Marjory: Hello and welcome, to the Homegrown Food Summit. This summit is brought to you by The Grow Network and my name is Marjory Wildcraft. I am so thrilled to be able to be the host of these summits each year, that we do them. Our next presentation deals with feeding your chickens really high quality food, that as you're probably aware, chickens originated from the Southeast Asia area. They're naturally jungle fowl, and their natural food are insects. If you've ever kept your flock of chickens, you've seen that in the Spring and Summer, when there's a lot of insects around, you'll see that their yolks become that deep, deep orange, and it's got to do with getting all that high quality protein and fat, that you can pick up from eating insects.

For years, I had been looking for a really good presentation on how to simply grow insects for your chickens, for your flock, in a scale that we can do at home, and I was absolutely delighted when Ann Marie, her name is, people call her Dash, came forward with this wonderful presentation on how to grow black soldier flies, mealy worms, and red wigglers.

Let me tell you a little bit about Ann Marie Dash. She always wanted to live out in the country, but when that didn't happen, she decided to bloom where she was planted, in a suburban one third acre lot in Dallas, Texas. Now, Dash grows a lot of food for her family, including tons of veggies, rabbit meat, eggs, and honey, but having very little money to work with, Dash is an expert at thinking outside the box, and making something out of nothing. Dash, describes herself, and is a first child of God, and hopes to glorify Him with all that she says and does. What a beautiful thing, huh?

Her urban farm, has become an epicenter of an active community, and a wonderful demonstration site of how to grow food in an urban

area, and in this presentation, as I said, it's gonna be wonderful, very simple, very practical. When you see Dash making this black soldier fly bin, you'll be going, Oh, yeah, I could do that. It's just so empowering. I will caution, not warn, but dog gone it, the audio quality is not as good as I would have liked, and I'm gonna be working with Dash about getting a microphone, that's a wireless mic or something, to improve that on future presentations, but the quality of content here is so awesome. I thought you would really like it.

Also, I'd like to remind you that, The Grow Network, we often do have the best selling authors, and the big research institutes, and all that, but we also are a user supported community of people, and a lot of the solutions to things are just not gonna come from big corporations, or governments, and you're certainly not gonna see them showing you how to grow mealy worms. So anyway, watch this wonderful presentation by Dash, and I think you're really gonna enjoy this, and I know, your chickens will.

Dash: Hi, this is Dash from Bloom Where You're Planted. Today, I'm going to show you how to use insects to make your homestead more sustainable. You might be saying to yourself, "How can insects help my homestead to be more sustainable?" I'm fighting insects. Well, let me show you how to use some insects to your advantage.

They work and produce while you're sleeping with almost no input or cost from you. They cut the cost of your chicken food by a lot. They make a great fertilizer for your garden that makes your garden brock. So together, we're gonna build a black soldier fly bin with a ramp on it where these nutritious insects are going to march right up that ramp and into a trough for your waiting chickens.

And then we're going to learn how to raise mealworms. We're gonna use those to feed the chickens too and cut the cost of your chicken feed. And then I'm going to show you how to harvest the wonderful fertilizer that they make to make your garden produce great vegetables for your family. And then we're going to learn together how to start a vermicomposting bin and to keep it going so that we

can harvest that black gold for our garden again, to make nutritious, wholesome food for our families.

So join me as we dive into the world of insects. The first insect we're going to talk about is the black soldier fly. Now, raising black soldier flies is the most sustainable thing I do on my homestead. Now, you might be saying to yourself, "Raise flies? I have enough flies on my homestead. I can't imagine raising any more." Well, let me tell you, the black soldier fly is not like your common housefly. It's actually a cousin to the mud dauber.

They have no sting, they will not bother you or your livestock. And in fact, they release a pheromone that repels the common housefly from the area and who wouldn't want that? So they're full of protein and calcium for your chickens, which cuts down on the cost of your chicken feed and gives you healthy, happy chickens that lay good healthy eggs for you and your family.

So let's get started building a bin with a stand so these nutritious insects can just march right up that ramp and into the trough, into the waiting mouths of your chickens. Let's get started together.

I'm covered in sawdust. All right, so what I did was my three two by four by eights, I cut into sections of two six inch, two 12 inch for the legs, four 19 and a half inch pieces, two 36 inch pieces, and two 42 inch pieces. And now let's put it together.

I'm going to put six-inch legs on one side and 12-inch legs on the other. So now we're going to strengthen the legs. So I put this 19 and a half inch piece here to strengthen these leg and I'm going to do the same thing down here in the six-inch leg. So now I'm going to add the 42-inch pieces to the bottom to stabilize it. I'm almost done. Okay.

We are done with our stand. I just wanted to show you the finished stand. What we've got here is I used the 42 inch pieces for the bottom here on either side and I used the 36 inch pieces for the top here, the sides, and they're angled. If you can see that, they're angled a little bit to take the roundness of the barrel. And then I use the two six inch legs cutting here and the 12 inch legs and back here.

And then the four 19 and a half inch pieces I used in front here to shore up the legs and then the bottom and the top of the legs back here. So that's it. That's your black soldier fly bin stand. And I originally got this from gardenpool.org and I made some changes though. They put a perch bar on the front of theirs and I decided I didn't want that. I just pulled up a log on the front of mine so that my chickens could just reach the trough just fine.

And then they put caster wheels on the bottom of theirs on each corner because they wanted to move theirs around a lot. I have pretty rough terrain. I don't want to move mine a lot. I just leave it stationary in my chicken yard, so I didn't include the wheels. But yeah, that's the stand.

So this is ultimately what it's going to have on it. This is going to be the black soldier fly bin. So you need to get a food grade drum off of Craigslist or ... It's gonna ultimately sit like that. Fits right on there. It's tilted downwards so the it won't collect a lot of rain and flood your black soldier flies out. Also tilted downwards so that your chickens will be able to get to the trough easily.

All right, now to prepare our bin. We are going to cut a smile out of our barrel, a big happy grin. So we're going to start out by drilling a hole to put our jigsaw blade down in. Here goes the smile on our barrel. So we're going to turn her smile. Perfect fit. See what I meant about the smile? So we're gonna turn our smile upside down to put it on our stand. All right, perfect fit.

Now what do you want to do is take a piece of the rain gutter that you bought and cut it to the length of the opening of the upside down smile. So it's about 21 inches. And then put your end caps on it. I popped mine on, after awhile they fell off, so probably some PVC glue wouldn't be a bad idea to just make those permanently on. And then we're going to fix it to our barrel. I already did one side here. I drilled a hole and put a zip tie in it. I couldn't live without zip ties. Could you? And I'm going to do the other side.

All right. There's our trough all attached. Then what you're going to need is a length of rain gutter. And this is from my other black soldier fly bin. It's about 38 inches long and you just slip it in here. I already have a black soldier fly bin of my own.

I'm building this to show you guys how to build one and then I'll probably gift it to Bonton Farms in downtown Dallas. They have a great farm right in the middle of a food desert. So this is going to be for them and their chickens so they can cut down on chicken feed and their farm will be more sustainable.

Now, one thing I found that was important about the trough is it floods. Of course it fills with water, so it kind of drowns the black soldier flies. So go ahead and drill a couple of drainage holes in it so that the water can just drain out and the black soldier flies will come in here. And then voila, free chicken food, a constant source of food for your chickens that's really high in protein and calcium.

All right, now that we've got our black soldier fly bin built, let me tell you how to get started. What you're going to do is get a scoop of compost or dirt and throw it in there, and then you're going to order your black soldier fly larvae from a reptile supply company. I didn't start out with very many. I think it was about 100 count of them.

People order them all the time to feed their reptiles with. So just order them from a reptile supply company. When you get them in the mail, you're just gonna throw them on top of that compost or dirt and then you're going to start adding your food scraps. Now, black soldier flies are ravenous. They eat everything.

So of course vegetable scraps, they'll also eat bread, and one time I even had a roast that had gotten a little bit off. I didn't want to feed it to my family, so I just threw it in the bin and the black soldier flies ate in one day. It was completely gone. So they are ravenous. I could probably support a small grocery store or a small restaurant with their kitchen waste and food scraps could support my black soldier fly bin.

So that's actually a problem for me, finding enough food scraps to support my bin. I actually plan on approaching a mom and pop grocery store and seeing if they'll give me their leftover food, the produce that has gone bad that they can't sell to the public to support my bin.

So if you raise rabbits like I do for food for my family, you can also put the leftovers in the bin. What I mean by leftovers is the parts that you're not going to use our feed to your dog. So the head, the feet, you could just throw them in there and they will devour those also and turn it into healthy food for your chickens.

Now, the way it works is this. It's kind of amazing that the black soldier fly larva have an instinct that when they get to a certain stage, they climb upwards and they go up into trees and they turn into the black soldier fly. And then they go lay their eggs and the cycle starts over again. So that's why they always have the instinct to climb up. So they're going to climb up and out on this ramp for your chickens.

When it rains, they usually do this when it rains. It kind of makes sense because birds probably wouldn't be out as much when it's raining. So when the pressure drops and it rains, they come out in droves. So every time it rained, my chicken's got a great meal. Now I do live in Dallas, Texas, so I have a long dry season.

So I learned a way to get my black soldier fly larvae to come out on demand, and that is to just put a sprinkler and let it rain down for just a few minutes, five or 10 minutes on the bin. And they thought it was raining and they were ready and out they came in droves. So in the dry season, whenever I wanted to feed my chickens, I just put the sprinkler on it for a few minutes and voila, free food for my chickens.

Now a couple of things, you don't want the bin to dry up. Like I said, I live in a dry season, so it's normally not a problem because all that food waste is going to produce moisture and the little rain that gets in there is going to be enough. But it does get so dry here in the summertime that sometimes I do have to add some water. So just

keep your eye on it. You just want it damp. You don't want it too wet where they're drowning. You just want it damp.

Now, there is one thing. This is only a warm season source of food. It doesn't produce during the winter and I haven't found a way to bring the black soldier flies inside my garage or something and have them produce in the winter. Now, they do survive the winter. I only had to buy that amount of worms from the reptile company one time.

And after that, I just left my bin where it was all winter and they just started producing. They showed up and started producing in the springtime. So if you lived in a cold climate ... I live in Dallas, Texas, so it's warm here, pretty warm winter. It gets below freezing, but if you live in a live in a really, really cold climate, you might have to take your bin into a shelter, a barn or something, a shed in the winter to get it through the winter.

I'm not really sure about that. Or you could just start your bin over again in the spring each spring by just buying those 100 black soldier fly larva to get you started again. As you can see, raising black soldier flies equals healthy, happy chickens and it really cuts down on the costs of your chicken feed.

It is especially helpful on an urban homestead because as you know, we feed chickens grain, but a lot of their diet should be insects. It's very important for them to have insects in their diet naturally. So it can really help because on an urban homestead, we can't pasture raise our chickens. They don't have the opportunity to get the insects that they would on a pasture setting. So this is really helpful to get them their insects and for you to get delicious healthy eggs.

The second most sustainable thing I do on my homestead is I raise mealworms for my chickens. And not only does that give my chickens nutritious insects to eat, which they need for their diet, it cuts down on my chicken food bill and they make fertilizer for me and not just any fertilizer, a bloom maker for my garden for my plants. So they help me to produce food for my family. So let me show you how to get started with your mealworm bin.

Unlike black soldier flies, which is just a summer warm season thing, I produce food for my chickens all year round by doing mealworms. And the way I do that is I bring them inside and I raise them on top of my dryer all year long. So they're always dry, they're always a nice temperature.

They like to be, optimum temperature is 65 to 70 degrees. So it's perfect on top of my dryer, they have never escaped. It doesn't smell, no one even knows it's there except for my family because we have the curtain closed when company comes over so no one even knows that we have insects over our dryer and it's a win-win for us.

So let me show you how to get started with your bin. First, you're going to need a simple glass aquarium of some sort with some sort of a mesh lid, something breathable. I just had this leftover from one of my kids' reptile projects. And then you're going to need wheat bran. I get mine from a feed store and they are going to live in this and eat it.

So you just dump it in. I did about three or four inches there. Just going to spread it out and then you're going to need your mealworms. Now, I'm taking mealworms from my old bin of course since I cleaned it out, but if you're starting mealworms for the first time, you can get them from your feed store. That's where I got mine. Or you can get them from a pet store because people buy them to reptiles and birds.

So I got them from my feed store and they asked me, "Do you want the large ones like the jumbo ones?" And don't get those because they've got some sort of steroid and they won't reproduce. So you want just the regular mealworms. And I didn't get very many of them. I think I got a small container of 100 or something like that.

Anyway, so you're just going to dump them in on top of your wheat bran. Next, they're going to need some moisture. So I've used some old potatoes that were going to sprout. You can use any vegetable and they just get moisture from this. I'm just going to put them down there and they will eat it up.

And I had noticed that my business more productive the more veggie scraps I fill it with. Of course you don't want to overdo it, but about every week I need to put some veggie scraps in there. I put about three potatoes in there. All right, and then I'm gonna put my bags on top, something to shelter them, and that's it. That's all there is to it.

And those beetles are going to lay eggs and produce worms without any work from you, produce great food for your chickens, great fertilizer from your garden. And this is going back on my dryer. Now, after your mealworm bi has been producing for awhile, it's going to look like this. You are going to have lots of mealworms in there and you're also gonna have some beetles climbing around. That's okay. And then you're also going to have this stage.

This is the larvae stage before the mealworm turns into a beetle, and this is the best stage for your chickens. It has the most fat in it. It's the best for your chickens, but you can feed them these in any stage. So what I do to harvest my worms, I'll show you. You need to shake out these bags a little bit. They like something to hide in.

All right, so what you're going to need is something to scoop with and something to sift with and then a container to put your worms in. So I'm just going to scoop and sift. And that is what you end up with, wonderful nutritious insects for your chickens. And the beetles, I just give them all stages.

So come with me as I feed my chickens these. They are going to love them and I have trained them to do whatever I want them to do and go wherever I want them to go with these. They love them. So if you want them to work a certain part of your property or garden or a garden bed, just sprinkle these in or lead them with these. Come see. Hi girls. Ready for a treat? I know. There's enough for everyone.

If that wasn't enough to convince you to raise mealworms, let me show you how they make fertilizer for you for free while you're sleeping. What you're going to need is, of course, your mealworm been fully established. It's been going for about four to six months, and you're going to need a screen of some sort. I just found an old

window screen that someone was throwing out. And you're going to need a bin too for the fertilizer to fall down into. Let me show you.

What I do is I just scoop mealworms out, put them on the screen, and just let this fertilizer fall through into my bin. All right, that's it. Look at all the amazing mealworms, nutritious insects I have for my chickens. Look at that, y'all. That's money. That's chicken food that I don't have to buy. It just keeps reproducing. And come take a look at the fertilizer they produced for me.

Look at all that y'all. Free fertilizer. Look how much there is. This fertilizer is amazing for your garden. It has four times the nitrogen of normal fertilizer and just a lesson learned, I mixed a little too much with my seedlings one year and I burned them. It has a lot of nitrogen, but the great thing about it is it also has phosphorous, which is a bloom maker. So the combination between that healthy nitrogen and the phosphorous to make the blooms is a winner for the garden. It just rocks your garden.

So how do you use this on your garden? I sprinkle liberally. I use about two cups for each four by eight bed in the spring and in the fall. I just sprinkle it all over the bed, work it in a little bit, and then you can put a little bit around each plant. I use about a fourth of a cup to go around each plant, kind of work it in in a white space around it if I want to do that.

So as you can see, there's a lot of good things about raising mealworms to make your homestead more sustainable. It's super easy. They really produce on their own without any input from you, especially if you can keep them inside like over your dryer like I do. Now, I talked about mealworm fertilizer and how great that was for your garden. Well, this brings us to another fertilizer that everyone wants and that's black gold or earthworm castings.

Now, this just isn't any fertilizer. The thing about black gold, it does have a lot of nutrients for your soil, but it has those beneficial microbes that help your soil, that eat organic matter in your soil, and it releases plant available nutrients. So it really rocks your garden.

All right, let me show you how to get started with your vermicomposting bins. Here I've got a 10 gallon bin and I drilled air holes about every four inches all the way around. And I've also done some drainage holes in the bottom about every four inches all the way around on the outside. And then what you want to do is you want to put compost in it, some partially de-composted compost.

Then you're going to put your veggie scraps in the next layer, and then you're going to need your worms. Now, you don't just want any worms, don't go dig up your worms from that clay soil that are used to going deep because you want red wigglers and those are the worms that are used to being on the top couple of inches of the forest floor and working through that organic matter.

So you want to order your red wigglers. I got mine from Texas Worm Ranch, a local earthworm producer here in my city. But you can go online, you can order your earthworms, and they can be set in the mail just like the other insects. And so you put your earthworms in there on that vegetable matter and then you need shredded newspaper to cover those. So you just shred your newspaper and do a nice top layer over those worms. And there you have it.

Now, how to keep it going. Some mistakes people make is they add too much moisture. You want to wet down the newspaper clippings before you put them in there, but you want it to be damp. You don't want to be able to bring out any moisture. Damp, not sopping wet. And then you only want to feed them about a handful of vegetable scraps every four or five days. No meat, no dairy, no bread, you just want vegetable matter in there.

So a lot of times people feed them too much and it just becomes overwhelmed and a stinky mess. So just feed them a handful about every four or five days and not too much moisture in there. And that'll get you off to a really good start. Now, you might have some moisture leak through and leakage or drainage holes and stuff leaking through doesn't work in my house.

So what I did was I put mine on another lid up on bricks. So I just put it on my floor under my hutch. You could put it in your laundry room. I just put some bricks up there to hold it up so that it can drain properly. And I didn't have much drainage and you shouldn't, but just for those times that it will drain, you don't want it to be a mess. So there's that and of course we need a lid. And that's that.

Now, a lot of people keep them in their homes and I've heard they've had great success with them. I did have a problem with gnats developing. Gnats developed in my home. I wasn't sure whether it was the vermicomposting bin or not, but I suspected that it was. So I was no longer willing to have them in my home, but a lot of people have said they're really successful. They have them in their homes and they don't have a problem with gnats.

Because I asked online, "What do I do about these gnats?" And I heard that a lot of people did have success with them. So I moved my vermicomposting bin outside under my rabbit hutch. So let me show you how I handle that. Now, if you do your vermicomposting bin inside, about every eight to 10 weeks you can harvest that black gold.

So I made myself a sifter out of scrap wood and a fourth inch hard wire cloth and I just put it over a storage bin and I dumped my vermicomposting bin in here, and I just sifted out the worms and the black gold fell into the bin below. I was able to use it that way. It was a lot of work though, every eight to 10 weeks doing that. It was my workout too, all that sifting. But as I said, I moved my bin outside and I think it's a lot easier way to harvest and to maintain.

Now I moved my vermicomposting bin out here under my rabbit hutch. I was worried that the worms might leave or they might freeze, but they didn't. They remained here working for me and they seem to be doing fine. So what I do when I want to harvest is I just take my scraps and I just toss them on one side of my bin and rake them out. And of course, my worms are going to go to this side, aren't they? Because this is where the food is.

So I leave it for a day and then I come back tomorrow and I harvest this side of the bin. I just scoop everything out and take it to my garden and all my worms should be in this side of my bin. So that's how I handle that. Now, if you were in an extreme northern climate, of course this might be too cold for your worms, so if your earth freezes.

Mine doesn't, but I do have a friend up north that has his in a shed where he has his rabbits. So he has it under his rabbit cages in a shed. I have another one that has it in a barn and they just have it like bricks, cinder blocks around it. And they have the worms in there, and they throw the vegetable scraps in, and they have some compost and leaves that they throw in there.

Yeah. I'll also put the veggie scraps and then I'll throw some leaves on top of that to encourage the worms to come over there and eat them. So I think if you were in a northern climate, you could handle it that way and I still think this is a lot more sustainable than having it in my house and harvesting it with a sifter.

Now how do you use this wonderful black gold in your garden? It is great stuff. And what you do is you can use 10 pounds for every 100 square feet. So I calculated that I would use about three pounds for each of my eight by four raised beds. And then if you want to use it as a seedling starter, you can put about 20 percent of earthworm castings in your starter to start your seeds.

And then if you want to just boost garden plants, you can put one handful just around each plant. That really makes your garden rock and it's a very easy thing to do, and they're doing all the work for me. What a day, all about insects. As gardeners, we spent a lot of time fighting with insects, but these are three insects we can utilize to our advantage to make our homesteads more sustainable.

First of all, the black soldier fly, the wonderful source of food for your chickens, full of protein and calcium and really cuts down on the cost of your chicken feed bill. And then there are those mealworms, also a

great source of food for your chickens and they make that fertilizer that rocks in your garden. It's a bloom maker, folks. It's big stuff.

And then there there's that black gold vermicomposting. Let those red wigglers make that black gold for you, for your garden, and then you can turn that into nutritious food for your family. So I hope I have convinced you today to raise insects for your homestead to make it more sustainable.

Marjory: Well, there you go. I mean, I am so ready to get myself a mealy worm. I've been going. I've actually tried it once or twice before, and I just didn't know the maintenance part, and I really appreciate her talking about every three or four months. You completely recycle the thing. I also had no idea that, that grass had so much phosphorus in it, and that's what you really want in the Springtime, for things that need to bloom. That's the nutrient that really helps your vegetables, and fruits to bloom.

Anyway, what a wonderful presentation. Stay in touch with Dash, by clicking on that button to the right. Dash has so much wonderful material, that she puts together. She's also created a certification for us, here at The Grow Network on raising rabbits. Just an amazing person. Click on that button to the right, and that will get you back, and that will get you to stay in touch with Dash. The button down below that of course, you'll be able to have this whole presentation for yourself, and as well as all the other thirty something other presentations, that come with The Homegrown Food Summit, when you pick up the whole Summit Package.

Well, this is Marjory Wildcraft, and come join me for another interesting, unusual, and amazing presentation, here at The Homegrown Food Summit.