



HOME GROWN

Food Summit

How To Make Your Own
Tarahumara Style Sandles
-Doug Simons

Marjory: Hello and welcome to The Home Grown Food Summit, my name is Marjory Wildcraft and I'm your host through this amazing series of presentations that we have. I like to think of the summit as if we are up high on the mountain top and getting to look down, get a great overview of all these different backyards and farms and patios and rooftops and gardens and getting to meet and see the experts in each of those areas of different techniques for living sustainably. We just have this amazing overview presentation. The one that we are going to go pop down to visit now is Doug Simons who is just back from a trip from the wilderness and he's hanging out in there in the park on the picnic benches.

He's going to show us how to make shoes. You might think this is a little bit off topic but many of us in The Grow Network are bare footers and for me personally I just made a decision about a decade ago, I just wanted to try and cut one thing out of my life that gets made in China and imported here. By no means am I a saint but that's just one thing I decided to do and shoes are a piece of that. Doug is going to show us how to make a pair of sandals in this.

Doug has spent about twenty years of his life living very primitively almost wild in the Sonoran desert and other wilderness areas. His learning and practice of medicine has taken place in the Western US, Mexico, Central and South America. Through these travels he has learned from many indigenous cultures some of which include the Tarahumara Indians, the Navajo, all different sorts of indigenous groups. Doug is also the creator of the video set; Alternatives to Dentists and a new video that's coming soon which is called Treating Infections Without Antibiotics, a very important topic. Right now Doug is going to show us how to make a simple pair of sandals. Let's pop down to the picnic table and visit with Doug. I'll be right back with you at the end.

Doug: Hi, I'm Doug Simons, I'm here today with Marjory Wildcraft and The Grow Network and today we are going to show you how to make a pair of these amazing sandals. They are called Huaraches De Tres Puntos or 3-Point Sandals and we are going to demonstrate how to make them.

Marjory: Doug, I have had a Potatoes in Tires growing project for a long time and I just so happen to have some sidewalls left over from that project. If you want to see it, check out some of our videos but this is the sidewall, these were truck tires for the truck our family uses and ...

Doug: Like a pickup truck?

Marjory: Yeah, just a pickup truck. That shows it in that other videos but what I had done is I had used a drill to cut this hole initially then just to jig saw one around.

Doug: Here's a few criteria that I have for sidewall. You can't necessarily use a smaller tire because the sidewall isn't wide enough. You need ideally a pickup truck tire like this one and you get into bigger tires than that then the sidewall has metal in it, metal fibers, cords they call them and it just gets to be too heavy and clunky of a tire. I like these a lot

and one of the tricks that I know, pretty important one actually is when you go to make this cut right here where you are cutting the tread off, you want to make sure you are getting as much sidewall as possible.

Don't just get it close enough to the edge of the tread. Get right out there because this isn't actually all that wide and you really want to conserve on materials to give you as much width as you can and then as it goes toward the bead, the inside of the tire here, it gets thicker and that happens about right here. There's going to be plenty of tire for us here but if this was cut sloppy, you might not have enough width for the tread to get in there.

Marjory: We cut this pretty close to the tread because we wanted a straight wall of tread for the Potatoes In Tires project.

Doug: I have cut these with a knife to get them out and you can do that as well. We'll talk about this but I am going to say it a few times, rubber is really dangerous to cut and the reason that it's so dangerous is that depending upon the angle of your knife and maybe the moisture, whether you put water on it, maybe some other factors, rubber will be very hard to cut or cuts like butter.

If you are starting out and it's hard to cut and you make the judgement that, "Oh, rubber is hard to cut." You are pulling and you shift your angle of your knife just vaguely it cuts like butter and you can be pulling hard and really cut yourself. You are always very careful with rubber to know that it can change from hard to cut to easy to cut in an instant and you always want to be prepared that you are not going to really pull hard when that happens. I've got a tension in my arm the whole time that I'm just pulling a little bit in case it changes and a lot of times I can hit that butter like consistency and cut pretty gently.

Marjory: Go with it?

Doug: Yeah, but you really want to be aware of that when cutting tire that it can change in an instant and you don't want to be pulling hard when that happens.

Marjory: That's a great safety point.

Doug: We are going to first go ahead and I'll show you how for me there's a few critical things in making these tire sandals, these Huaraches De Tres Puntos, 3-Point Sandals that I like to get pretty much really well done. There's other things that you can be a little bit less exacting on but there are things that I try to be very accurate on. One of those is cutting the initial size, marking the initial size of the sandal. I want to do that very carefully and part of the reason that these sandals are ... Here you can move that out of the way for a moment ... That these sandals work so well is that we cut them exactly the size of the foot, in fact a tiny bit under. When I measure this up to my foot, there is nothing hanging over and that's what we were discussing before, is that extra lengthened shoes makes us so stumbly. With a sandal like this it can be even worse because they'll catch on things all the time but ...

Marjory: The sizing of your foot is really critical?

Doug: The sizing is nice and critical, it's easy to do but you want to know that's important. Now we have this sidewall here on the table and we are fixing to mark it, to cut it and what we are doing is I'm moving along trying to find the widest part of the sidewall because again this stuff starts to swell here, the material gets thicker and we are trying to avoid that. Right here isn't bad. I'm just going to check the whole thing, right there is pretty good but I don't want to miss a wider spot in case it's there. We've chosen a spot on this tire, right here that is the width we want with as little of the swollen material here.

This is a critical part, as I said there's a couple of things. You really want to mark this well and you can do it by yourself absolutely and that would be done by kneeling down like this. The experience that you really want and I'd ask Marjory to do this, is that you don't want to be having your weight side to side or sloppy in any way. You want your weight really relaxed fully down on your entire foot. Your foot is fully spread and flat.

That's an important thing so that you get a nice outline then we are going to just take a ballpoint pen on this rubber sidewall, it writes really well, carefully mark then we'll move on to cutting it. Now we are all set and we are going to make this mark. Remember that the pen itself, you can get an extra length by using the pen and properly. You really want to make sure that you are the same length as the toe there and here we go. It can be a little artistic in the beginning and I don't really always love re-cutting these, I'm pretty careful. I try to get it just right. We are just going to use this cut right here and I'm paying attention that my pen is not giving me a false draw.

I'm looking at the line I'm creating, it's really the same size as the foot. We went right through there and on around paying attention. I'm just finishing the drawing all the way around even in the arch, you want to pay attention so that you are the same size of the foot. Don't get too far in or out. Looks like I got it, you can pick up your foot. There it is. We are going to cut it now, we have a brand new X-Acto knife blade. I've done it many times with just my knife but you want it sharp and again safety first on this one.

Remember that this rubber can be really deceiving as to how quickly it'll cut. Here we go, we are just going to cut it. Almost through all the way, really careful to keep my hand in front here. Sometimes if I've rubbed off the pen a little bit, I can see where it is I'll just darken it a little. I'm being really careful, I'm not pulling hard at all. I've taken the tension off the cut by opening it and we'll cut this pretty carefully, my body is right here. There it is. It's a little sloppy right there, trim it up a little and remember I'm barely pulling on this knife, very careful right now. It's nice and sharp, the rubber is cutting easily, not bad. Step on it. Not bad at all, scoot back just a ... There you go. Nice and flat spread out foot. There you go, we did a great job.

This again is important, getting this hole just right. Spread your toe there for a moment. We want to get right in on the web of the foot and make that mark and don't forget that the pen is fat. It'll put a mark an eighth of an inch off or even more a quarter inch off. Account for that when you make the marks, don't change your foot in any way for me.

I'm going to just make that nice dot right there. Do take your time to do this just right and that'll make a big difference. Hop off and let's see what it looks like. I got a dot, that's all I needed. I'll make it more visible carefully, there it is. That's where I want my hole just like that.

We are going to mark this other one again just stay right still. I got the angle slightly because of the way the pen is, nice dot is going to appear there, just stay there. Now, I'm going to demonstrate how I like to put the other two holes which go on the side. Keep your foot just there. I like to go straight down from the front of the shin. These don't have to be super critical. I'm going to make that mark right there where that is on that side then I'll come over to the other side and make that mark for the other one. Straight down from the shin, they'll end up being pretty straight across from each other and we'll just make that mark. Now we've got it. Now we are going to mark the holes on the side of the foot here, the three holes. It looks like four but I'll explain that one later, these three holes.

This placement is not that critical, this hole could be here or here. I demonstrated where I like it, down the front of the shin there. The thing that's important though is that it's got to be quite a ways in from the edge of the rubber because otherwise it'll quickly tear out. If you put that hole say right there, it'll rip through. Get a good inch in, like these are and they are basically across from each other. I learned that by tearing some out and not wanting to discard the shoe and I put it over here few times, it doesn't really matter too much. This hole is not quite as critical.

I encourage you to put it front of the shin, about there and I think you'll like it better. Here I have the mark. I'm going to bring it in about that inch and you could use a tape measure, it's not a bad idea and there's my hole. Here's the other line. I'll probably scoot it to much that one a little bit in an inch and there's my mark. We are going to put a hole through this for these three holes that we need. Today we are going to use an electric drill and a drill bit. I do it sometimes with a knife though that's a little tedious but works also a leather punch works really well especially the ones you can hold and hit with a hammer those work really well.

We are going to use this electric drill to put these holes in this tire. We are going to drill this hole that I really want in the right spot and I decided to use a smaller drill bit as a pilot hole because it's a lot easier to get it where we want it. There we go. Now just drill a larger hole. There it is. We are going to add this last and fourth hole, this is only here so we can cut this trough that allows for the cord to be inset so it doesn't wear out easily. Now it's in that groove and it's more protected when you walk and it doesn't break so frequently. That placement of that hole is not really that critical. You want it far enough apart that it doesn't just tear out really easily and that's really about the biggest criteria on that and it's in, it's something like an inch. We make a mark then go ahead and drill that last hole about right there, I think would be good.

We now have the two side holes, the hole that goes between the toes and the last hole that's there so that we can create that trough to protect the cordage from breaking when we walk on it. This is probably the trickiest part of the whole thing so that you do

not cut it to an over depth. That's just going to be a little trough, a little notch like that. As you can see on this one here, this finished sandal, same thing right there and there. I'll just draw them. Sometimes I flare that one a little bit.

We want to do this one really carefully and what we are careful about of course is not cutting our hand but mostly you don't want to go too deep or you have destroyed your sandal. You take it a little bit at a time and just cut out a bit, it's about right there. I'm going to do this other side, now I'm folding it over so that I can see how deep I went and that's about right. Right there. I'll go ahead and just cut that piece out, finish the cut right there and go ahead and cut it across. It is easy to make these too deep, then you've got a ruined shoe. Cut them shallow or carefully, slowly a little bit more to take out and don't forget you can cut yourself really easily with this rubber because it's so inconsistent on how easy it is to cut or hard.

You think it's hard to cut then it just changes to nothing again. Close to the last step here is that I want to put a piece of leather on top like this one has so that our feet aren't directly on the rubber. It's a lot more comfortable maybe less toxic, at least I think it is. This is commercially tanned leather. This is an effective piece of leather you can even get them heavier. This is close to some pretty thick leather and it's called ... By my experience it's called saddle leather and you can go to any saddle shop and they have scraps all the time of pieces that they can't use that are basically this size.

We'll be able to get a couple of shoes out of here, figured out and get a couple of sets. What we want to remember is it's not critical but we want the grain up, the sleek side up. We'll trace it on here. While I'm here I'm going to go ahead and mark these holes. Now remember there's four holes but you really only need three in the top piece of leather. Try to remember that and if you accidentally puncture an extra hole it really makes no difference at all. See if that pen was long enough, I got all of my holes; One, two, three and I got the marks, the next thing is to cut it out.

Here we have a pair of leather sheers, let's see if they work. We have the pieces of leather cut out and again it doesn't matter that they are really perfect because as soon as these get wet, this leather will stretch and you'll be trimming it again, a second time maybe even a third time before it's done stretching. The thickness of the leather is actually pretty important, it could be even thicker. This stuff will work fine but you can get even a heavier leather sometimes in those saddle shops that's good. If you have a light leather that's like a material like this, it just wads up really quickly right here.

This heavy leather is a better material. Now what we are going to do is punch these holes and add the straps. Now I'm going to put the holes in the leather, if you had a leather hole punch, that would work just fantastic but so will this. Put the holes in. Now it's only a matter of putting them together. I personally like leather thong to go with these though you can use other types of material. Things like this parachute cord will work fine though again I prefer the leather, it has more of a natural feel and also it tends to hold better on my foot.

It's time to string them up. We start here at the toe hole go through the leather. Go

through the toe hole of this other one in the tire. If we hadn't put this extra hole in this trough, you could knot it but the problem with knotting it is that, that wears off quickly like three or four or five times a day as opposed to once every few days that you might have to if you are wearing them steadily. If you are using a synthetic cord as opposed to this leather, that often lasts even longer.

Flip that under. It's tied off and once we stand on it, all these stuff gets tightened up a bit. Again, now down to the outside of the hole on the outside of the foot. Up, underneath that cord right, this will go around the heel now. Down through the sandal again, back up and under then we'll demonstrate the tie off once we get them onto Marjory's feet. You can bend down and do it yourself there for a little bit. If it needs to be a little longer around your heel, you just work it a little bit. Remember these are absolutely brand new, it's going to take a second for them to get worn in. That's pretty looking right there.

Marjory: There we go, it feels good and then?

Doug: We have plenty of extra. We want to bring it around your foot ease up that extra. This extra is there for when your strap breaks or whatever and now you just bring it down, bring it under here and you get a lot of tightening experience however you want it to be just like that. If you didn't have anything to go around your leg you would just go from here but it's really nice to at least have one wrap around your leg. That's it. Now go ahead and put on the other one. It's easier for you to put this on than me but ...

Marjory: How did you just tie that?

Doug: Just a half hitch sometimes you want more than one half hitch.

Marjory: These do feel good.

Doug: We'll get them jagged out here in a minute so go ahead and put that one on.

Marjory: Where's the heel? There it is.

Doug: Let me go on and get your foot more onto the foot bed here.

Marjory: We need to go this way, to take it up, then I go like this?

Doug: Keep it snug. Right up there go ahead. Go a little more, that's good. One less, there you go. Right now get yourself centered on there, there you go. Put it under and tighten it up a bit. These sandals should be nice and snug on your feet. The snugger they are, you don't want them over tight but the more snug they are the better they stay on your feet and the more you feel like you can walk in anywhere. If they are slipping and sliding around on your feet, it's just like any loose shoe, not ideal. You might want to ...

Marjory: We are going to tighten this up?

Doug: If it did tighten up, you might have to do that side, that's not bad. Go ahead and put your hands over here. You don't have to take it apart but tip your foot and go ahead and feed that through. It's easier usually for the hand to do it than me. Here, maybe I can get it for you. Here we go. Let me get a hold of it. You want to keep it tight as you put it on but don't get it over tight especially in the beginning.

Marjory: I think that's got a really good feel. Let's do the loop thing.

Doug: You might have been able to go around once more now that you've tightened it up. Half hitch. If you need to, you can put two but usually one is sufficient. They start to slip, you got a lot of lee way. Stand and put your feet on them. Right now you want to make sure you're on that foot bed, make sure you feel like your heel is on there. Stay in one place don't move, just move them round. You can already see that these sides is going to end up getting trimmed but there's no sense in messing with these until you've walked with them and gotten them wet. One of the important parts of breaking in one of these pair of sandals is that you really consciously for the first twenty minutes or so make sure that your heel ... Bring your heel and turn it just a little right here ... Make sure that your heel isn't breaking way off the sides. Make sure your heel is landing really center and if you can do that for the first twenty minutes or so they'll settle in just right.

The other thing is that for those of you who might make a pair of these, wear them only as long as your feet are comfortable in them. Some people that's only fifteen, twenty minutes and then take them off because you don't want to wear blisters. Marjory goes bare foot quite a bit so her feet are fairly tough. Most people don't have too much trouble with them wearing but you have to get used to that center thong and sometimes right here. Don't let them irritate your feet before you take them off and put them back on.

Within a day or so or often your feet are pretty good. It may take some people a few days. The other thing to remember is that once you've walked around on them maybe walked through some water and let them dry, eventually not too long this piece of bed leather is going to stretch then you just trim off the edges where it's big and you now have a great pair of sandals.

This is Doug Simons, thanks for watching.

Marjory: This is Marjory again and I just wanted to give you a quick update in the months that have been since we filmed this and that I've been wearing these shoes. I wanted to let you know that when we made this we just decided to do this footage, we had some extra time, we had been shooting a lot of footage and we just decided to fit this in and we made it with stuff that we had on hand and Doug told me at the time that the straps I was using were pretty thin and that I probably wouldn't like them and he was right. With very thin straps like that I found it very difficult to keep them tied on and they weren't as comfortable. I have been wearing these shoes for several months, I took them with me on the trip to the Copper Canyons to spend time with the Tarahumara people.

It was actually the Tarahumara themselves who gave me the thicker straps and I've got a photo here to show you. These are much more comfortable, they stay tied a lot better and this is what I'd recommend for wearing straps. I did have to go and make the notches a little bigger on the bottom of the sole but that's a pretty quick fix. Hope you enjoyed this presentation.

Doug, if you want to stay in touch, he is really an amazing guy with a lot of just earth medicine. You can pick up his video set; Alternatives to Dentists, really useful information. Shows you how to clean your teeth with a stick, tooth powder that you can make yourself even how to treat cavity, infected teeth, abscesses, very useful video. I highly recommend it. Is it in the end all? No, it's not but is it a lot of whole good techniques and worth it less than a dental visit? Absolutely. Definitely check that out, that's on the button on the right.

Some other speakers that we got coming for you, extreme composting with David Goodman, this guy is so funny. I love David and he is a big hit on The Grow Network blog. Everybody loves his videos, he is just a character and he is really living it. He lives it day to day he's going to be doing one on extreme composting that's coming up. Seven ways that growing your own food saves the world seriously, Ronnie Cummings is the founder of The Millions Against Monsanto. That should give you a tip off right there but commercial agriculture is so distractive to the planet and in this talk Ronnie and I go back and forth on how distractive it is and the impact you are having when you grow your own food in your backyard. It's a lot bigger than you think, listen to this talk and you will definitely be inspired to continue on and do more.

Jacqueline Freeman is going to be talking about how to take care of bees naturally. We got so many requests at the two thousand and fifteen for bee keeping that we decided we are going to listen to you, right? If you want more on other topics that you are interested by all means just drop us some notes on the comments. I read all the comments or should send over an email in one of the different emails we have, we definitely want to here from you and if you have some other suggestions for the two thousand and seventeen summit, I want to here that. This is Marjory Wildcraft and I will catch you at the next presentation. we are going to listen to you, right? If you want more on other topics that you are interested by all means just drop us some notes on the comments. I read all the comments or should send over an email in one of the different emails we have, we definitely want to here from you and if you have some other suggestions for the two thousand and seventeen summit, I want to here that. This is Marjory Wildcraft and I will catch you at the next presentation. we are going to listen to you, right? If you want more on other topics that you are interested by all means just drop us some notes on the comments. I read all the comments or should send over an email in one of the different emails we have, we definitely want to here from you and if you have some other suggestions for the two thousand and seventeen summit, I want to here that. This is Marjory Wildcraft and I will catch you at the next presentation.