Good afternoon and thanks for joining us I am Judy Simpson. There are a variety of reasons why houseplants are important. First and foremost they add beauty and visual interest to a room but they also help raise humidity, increase the oxygen levels and decrease dust. But if you think you know all about houseplants think again. We’re about to show you a new way of growing your favorite indoor plants. Back with us is our frequent contributor from UVM Extension, horticulturist Leonard Perry. Welcome Leonard and you brought along a friend.

Leonard.: I have; it's great to be back and great to welcome Joan Lynch back who has been on before representing our state association, the Vermont Nursery and Landscape Association. She’s on the board of that, but today she comes wearing a different hat if you will from her own business to tell us about living walls. I’ve known Joan since she came on many years ago and you’ve really developed a nice business and I am excited to hear all about living walls and what those are.

Judy.: Yes tell us about living walls what are they?

Joan.: Living walls go by several different names. You may have heard them called a green wall or a vertical wall or even a bio-wall. What they are in essence is a vertical textural green space that takes up minimum floor space. They can be built indoors or outdoors with different kinds of plants, tropical vs. perennial depending on your climate. They can be freestanding units as we’ll see in our demonstration or fixed to a wall.

Judy.: As a plant professional how did you get interested in these?

Joan.: They really started back when I got interested in green roofs which we’re now seeing here in Vermont. When I went to get my installation certification for green roofs I was introduced to the green wall and I said that is cool. With my passion for interiorscaping I installed my first living wall a year ago.

Judy.: Before we focus on the indoors Leonard you have some personal experience with one of the largest living walls in the world where is this?

Leonard.: That’s in Madrid Spain. I was lucky to be over there on a family trip last year and I know this wall is five stories high on the side of a building. It has over 10,000 plants representing over 250 different species. As you see here woody plants things you don’t think about growing on walls. Here’s some perennials all kinds of flowering perennials like you would have in a garden
grown on the side of the building totally vertical. That was pretty amazing to see. Here's a close-up of some of the structure. All these components similar to what we will be looking at later. It doesn't have to be five stories. Here's an example I saw at a trade show a couple years ago. This is sweet alyssum like you grow in your garden just growing on a skirt. It does not have to be fancy just some plastic held under framework with some flowers planted in it. You can buy the structures like this and these are herbs. This is rosemary of the bottom and you could have an herb garden on your wall just outside your patio if you don't have much room. Here's an example of a combination of succulents, sedums and different colored foliage, perennials like Ajuga, you could even throw in a tropical like a spider plant. Just a lot of different examples. This shows a frame you can buy for this use. It has a mix in there in a bag and you have holes that you plant in.

Judy.: Joan why would someone consider a living wall either at work or at home.

Joan.: Plain and simple plants clean the air and what we're finding with the interior spaces is that there's a high volume of indoor air pollutants which are caused by the buildings themselves. From the building materials to rugs and carpets we put in, paint, pet dander, smoke aerosol sprays, that sort of thing. Plants actually filter those contaminants out through the pores of their leaves and the microorganisms that are living in the soils that the plants are in. In exchange they give us oxygen so it just cleans the air, makes it a nicer place to live, plus they help us emotionally through their calming effect.

Judy.: You install simple units as part of your business which will take a look at shortly but first we have some examples of some various indoor settings.

Leonard.: There's several pictures that Joan brought in. I saw this being built but haven't seen the finished one at Longwood Gardens down in Pennsylvania. This is a brand new edition to their conservatory. That's all living wall.

Joan.: It's stunning; absolutely impressive.

Leonard.: We'll take a closer look at that one and you can see some of those ferns.

Joan.: And there's a system, they are using a trough system.

Leonard.: And its vertical on the wall and plants are planted in that. Tell us about this one.

Joan.: This is an example of the unit were going to see in our demonstration. These are all pots within pots on the wall. That is a movable new unit there.

Leonard.: You can see it's a really nice contrast with the white. It can be very simple.

Joan.: Using all one plant material is very effective.

Leonard.: It looks like an ivy there in an office space out in California.

Joan.: This is also the same kind of unit were going to show in the demonstration. Those pots are all removable. Those are all poinsettia that are making the Charlie Brown sign. So you can change them seasonally.

Leonard.: That's a good idea. Then there's this one from New York?
Joan.: This is in New York, that’s correct and this is a three-story living wall and individual potted plants.

Leonard.: And then a closer look going up the stairs just to show all the different foliage textures. One of the keys I think of mixing these looks like to put big leaves and small leaves to create some interest if you’re using a lot of green.

Joan.: Absolutely.

Leonard.: That would be a fun place to work out. Looks like you’re in the tropics.

Joan.: Yes and the air would be healthy.

Leonard.: Definitely would be very healthy. This is a nice one and I like it with colorful foliage. I think light is one of the key things to look for when choosing a plant.

Joan.: Also you can use supplemental lighting which is going to help enhance the plants as well as show off the wall as art.

Leonard.: Here’s a great example in a business space in Minnesota of just all greens and different textures.

Joan.: You can see that you can change out some of those panels so if you have plants that go south on you so to speak you can change it right out.

Judy.: What a great idea.

Leonard.: So these are all modules put together. This is a nice free-flow design it kind of looks like a tapestry but these are all living plants growing on a wall. Here it’s not all green so you can get the contrast using different colors.

Joan.: Look at the plants not taking up any floor space.

Leonard.: Exactly. That a great example here how they don’t take up space and it shows the system.

Joan.: That’s right and that’s what we’ll show today too.

Leonard.: Before and then you see it afterward. It’s very similar to what we will have today.

Judy.: That’s amazing.

Joan.: And when they're done blooming you can just put in another plant.

Leonard.: I like all the variety here. And then succulents, I suppose are popular now do you see many of those used indoors? They need more light.

Joan.: They need more light. If you have the right space and the right plant in the right place.

Leonard.: They are pretty foolproof given good light so again another example. Outdoors on a brick wall I like this you could use impatiens. I like this one with pansies and ivy mixed. And there again a design woven through. It’s a nice setting if you have a brick wall it would be a lot better look at that. And again a lot of creeping perennial plants too would be good if you’re outside. There are a
lot of tropicals here. I like that--all the different colored foliage. It makes a statement and I've even seen them in picture frames too. That's a nice one with staghorn ferns and other plants. I guess we know what time a year it is here. And I think you know about this one.

Joan: Yes this is a private home installation we did last year.

Judy.: Fantastic. Joan is the whole concept of a living wall new?

Joan.: Actually it's not. It dates back to 600 BC with the hanging gardens of Babylon. More recently there's a French botanist by the name of Patrick Blanc who started a really innovative process with hydroponic technology. He started back in 1988 doing huge living walls in Paris.

Judy.: We saw a photo of one of your own installations and we brought along an example to show just how it works so let's go take a look. Wow! This is what it looks like when it's all set up. Is this a typical model that people would get to their home or office?

Joan: Yes it is. This is the portable model. You can expand on this and make it much larger for a larger space or customize it to be smaller.

Judy.: Is it hard to maintain a living wall?

Joan.: No it's not if you use the right plants and the right place. Typically indoors is very low light unless you have a skylight or something. So fortunately we have greenhouses that supply us with the interior foliage for low light. These plants came from Claussen's in Colchester and they have a lot of selection to choose from for low light plants.

Judy.: So it's a pot system really.

Joan.: That's right. The way that we take care of these is not only with light but also with water. You can hand water them or you can have an irrigation system which this has, which I will show you.

Judy.: Let's take some pots out and we can take a look at the system and then put some different pots in and show how easy it is to change out plants.

Leonard.: That's one of the things I love about it, is the fact you can take plants out once a week instead if you get tired of them.

Joan.: Or something happens to them like it always does. I'll take this first one out here. These are great for their filtering there's a list of plants that are superior as far as air filtering: rhododendrons being one, dracaenas being another. What we have here this system is a grid system on a stand, free-standing. There's individual pots. These are 6-inch pots that hold a 6 inch potted plant. An optional system that makes life easy once it's all set up is that this has an irrigation system of tubing that fits right into the pot. This is a little grommet that fits in water fills into the spots and then it gets sucked up into the bottom of the planted pot itself.

Leonard.: So actually the pot does not have holes it just holds the water in. So the water goes in.

Joan.: It is a wicking system that goes up to the plant which makes it very easy.

Judy.: Let's put some new plants in here and see how the looks.
Leonard.: Do you want the red?

Joan.: Let’s do the anthuriums. These are a great air cleaning plant and very very pretty. They bloom forever. They're very easy to take care of; they like moisture. They just pop right in and it changes the whole look.

Leonard.: Look at how easy. It was all green and now has more color.

Joan.: That’s another good one for air cleaning. When the vermilions are done and turn all green you can take them out and put something else in unless you like the texture of the leaf. We can change the whole thing put poinsettias in or cyclamen. One thing I would say to do if you're going to do an irrigation system and all the pots get water at the same time then you want to use plants that have the same water requirements.

Judy.: If people are interested in this was the best way for them to get in touch with you?

Joan.: They can go to my web site which is: www.theinnergarden.com or they can call me at (802)-353-5573.

Judy.: You mentioned some of the plants are better for indoors and filtering the air. Leonard you brought a lot in front here that perhaps you can tell people what they are.

Leonard.: There are some others here that are really nice. One of the most standard ones for years is this dark leaf plant here the rubber plant. Originally it was green now you can find the darker forms which are really a nice contrast. I guess this is one of the new variegated Dracaena?

Joan.: Lemon lime I believe is the name of it; I love that plant, it pops with color.

Leonard.: Yes with light green on the edge and dark green with the white stripe in the center it’s just beautiful. This is one I am not familiar with. I haven't seen it much, it’s a traditional corn plant. It's not only dark green but it has the nice color on the edge.

Joan.: This is a new introduction called the dragon series of Dracaenas.

Leonard.: That's great. Some of the others we are looking at of course the snake plant or mother-in-law’s plant. That takes really low light.

Joan.: And very little water; you can just ignore that plant and a great air filter to boot.

Judy.: I want to thank you both for coming in and bringing in all these amazing plants. I love this system it's beautiful. Thanks to all of you for joining us too. I’m Judy Simpson we will see you again next time on Across the Fence.

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