



living willow structures



Living willow tipi.

what are they?

They're garden features like fences, domes, arches, screens, windbreaks, play tunnels or more artistic creations, that are alive – made of willow. Willow is a most amazing plant. You can cut off a length, stick it in the ground, and it will grow. You can stick it in the ground horizontally and it will root downward and shoot upward. You can even stick it in the ground upside down and it will take! It grows incredibly quickly, making it a prime candidate for a lot of research into use for biomass burning. It also loves water, and therefore can be planted in very wet ground, where other plants would not thrive.

Its uses seem endless. Living willow has been used as an artistic medium, creating living sculptures for example. Many community gardens and allotment projects have created structures for practical reasons; to give shade, to sit on, act as a wind-break or to screen off various areas by making a 'fedge'. A fedge is a cross between fence and hedge; a sort of living fence.

Living willow archways – good for aesthetics, shade and plant support – are a great favourite with schools. Children can take part in planting the rods in the winter months and watch as their forlorn little sticks transform into lush green creations in the spring of that same year. And dried, the whips of the willow are widely used in the making of countless things including baskets, wreaths, shelters and paper lanterns.

what are the benefits?

Creating structures with willow is easy to do yourself and doesn't cost very much; nothing in fact if you have your own source of willow. It can be extremely satisfying, but can also provide valuable educational opportunities.

It's also a resource – you can harvest new growth as whips to make baskets etc. Plus willow structures can provide height very quickly if needed in your garden.

From an environmental perspective, as your structure is alive, it will absorb carbon from the atmosphere; it doesn't involve any factories or manufacturing processes, and doesn't require any creosote or other toxic preservatives – unlike your common or garden fences, seats or arbors. It's prettier than a fence, too.

It also provides a habitat (and food) for wildlife, and its leaves enrich the soil (or your compost heap) every year.

what can I do?

Willow needs to be harvested in the colder months. This is because the sap is down at this time of year, and it is this sap which makes them brittle. Remember – if it's sappy, it's snappy! Professional growers cut from the beginning of December through until March, so plan to create your structure in the colder months. Pick your variety with care. A firm favourite is *Salix viminalis* but for added interest, you can select by stem colour. There are greens, browns, silvers, purples, oranges, reds and yellows to choose from. It's pretty cheap to buy willow and the beauty is that once you have some of the right variety, it doesn't take long to grow some of your own to harvest.

Consider your site carefully. If you're building your structure on an allotment, remember that if you plant it too close to your vegetables it will compete with them for nutrients and water. Likewise, if you don't clear an area of turf on a lawn where you are about to put your structure, it's possible (but not certain) that the grass immediately surrounding the base will yellow due to water shortage. Also if you plant very close to a wall, roots have been known to cause structural damage. Willows have very large tap roots, so be careful not to plant them over water or sewage pipes. And remember, willow is a living thing, so will not do well in the shade of another tree. In general, create a willow structure as far away from anything else as is practical.

The other thing to consider up front is what mulch you will use. Old hessian-backed carpet is fine, as is cardboard (though this can be fiddly). A ground cover called Mypex is also widely used. This is

living willow structures



lowimpact.org



A living willow dome in summer; you can build them any size, and kids will love it.

woven polypropylene (plastic) which allows the penetration of rain water whilst preventing loss via evaporation. It is also excellent at suppressing weeds, which will act as competition to your willow. Mypex is more effective and easier to use, but if you want your structure to be as green as possible, then biodegradable carpet or cardboard is for you. Once the project is planted, the mulch can then be covered by wood chips, sand, compost or other material you might have to hand. When you're ready to start, clear a strip 60cm wide along the length of where you wish to plant, so competition (weeds, grass etc.) is reduced to a minimum. Large willow rods, which will be about 2 years old when cut, will provide structure. They can be put in every metre or so, and need to go down to a depth of about 30cm. Use a spike to make a pilot hole, then trim about a centimetre off the bottom of a rod. Make it an angled cut – about 45 degrees - so there's a point at the end. Then place the rod very firmly in the hole, and tread round the area to firm up. Plant rods in pairs at the desired width apart, and then wind and tie the tips together at the height you want your arch to be. Further structure is then added by tying the individual arches together.

For a fedge, space between the larger rods is filled with smaller ones which will be a year old when cut. These are planted about 15cm or a hand-span apart, 15cm deep and at a 45 degree angle, then woven in and out of each other to create a self-supporting lattice shaped arrangement. The tips are then twisted and wound together. Any additional tying off can be done with little willow whips, which are bendy enough to act just like string. And remember, willow is a natural

thing, so you don't have to be too preoccupied with straight lines! A meandering fedge, or one that undulates can look far more interesting than a straight or symmetrical one. All sorts of shapes can be created this way, and combined. Domes and wigwams are firm favourites, but some very interesting living furniture has been made in this way too. See books or websites for inspiration.

The downsides to willow structures are really the same as the upsides! Because they grow so quickly, you'll need to prune them a lot or they will quickly get out of hand. You'll also need to be attentive to their thirst, especially in the early days. Many a school archway has met its end while everyone is off on their Easter hols. Having said that, it's possible to dig up a sculpture that is taking over a space, or to replace one that has died.

resources

- see lowimpact.org/living-willow-structures for more info, courses, links and books, including:
- John Warnes, *Living Willow Sculpture*
- Stephanie Bunn, *Working with Living Willow*
- <https://bit.ly/34skgmc> - DIY biotecture: build your own backyard living willow dome
- rhs.org.uk/advice/profile?pid=588 – living willow advice from the RHS
- canada-wine.com/wovenfence.html – how to plant a living lattice fence
- awaytogarden.com/creating-living-willow-structures-michael-dodge – interview with specialist Michael Dodge
- atlasobscura.com/places/auerworld-palace – living willow palace built with 300 volunteers
- shakespearelink.org.uk – watch Shakespeare in a living willow replica of the Globe Theatre



New fedge coming to life in the spring.

Feel free to upload, print and distribute this sheet as you see fit. 220+ topics on our website, each with introduction, books, courses, products, services, magazines, links, advice, articles, videos and tutorials.

Let's build a sustainable, non-corporate system.

facebook.com/lowimpactorg

Lowimpact.org

twitter.com/lowimpactorg

Registered in England. Company Ltd. by Guarantee no: 420502