



living willow structures



a living willow dome in summer; you can build them any size, and your kids will love you for it

what are they?

Willow is an 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 research into use for biomass burning. It also loves water, and can be planted in very wet ground, where other plants would not thrive. It's 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 areas by making a 'fedge' - a cross between fence and hedge. Living willow archways – good for aesthetics, shade and plant support – are a great favourite with schools. Children can plant the rods in the winter months and watch 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, and it doesn't involve any factories or manufacturing processes - unlike your common or garden fences, seats or arbors. 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, because the sap is down at this time of year, and it's the sap which makes them brittle. Remember – if it's sappy, it's snappy! Most growers cut from the beginning of December through until March, so plan to create your structure in the colder months. A firm favourite is *salix viminalis* but for added interest, you can select by stem colour - greens, browns, silvers, purples, oranges, reds or yellows. It's cheap to buy willow and it doesn't take long to grow some of your own to harvest. If you are building your structure on an allotment, if you plant it too close to your vegetables it will compete 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 definite) 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



inserting a window into a fedge - made from 2 whips wound around each other and tied off with a third one; all ties can be done with willow rather than string or twine



2-year-old willow rods (right), 1-year old growth (middle) and young whips (left) with a sheet of Mypex

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, but at least 3 metres from a wall.

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 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, soil or other material you might have to hand.

When you are 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 your rod. Make it an angled cut – about 45 degrees - so there is a point at the end. Then place your 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 the resources section for inspiration.

The downsides to willow structures are really the same as the upsides! Because they grow so quickly, you will need to prune them a lot or they will quickly get out of hand. You will 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 easy to dig up a sculpture that is taking over a space, or replace one that has died.

resources

- see LILI's website for living willow courses and a book – *Living Willow Sculpture*, by John Warnes, £7.95
- LILI's living willow links page has a list of UK specialists, suppliers and installers
- Julie Starks, 01225 444711, juliestarks.com – living willow builder and LILI's course tutor
- living willow theatre, shakespearelink.co.uk, 01597 811487 - Shakespeare plays in Powys

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