

# NexGen Shrub Shelter Introduction

Stake and plant sold separately



**100% biodegradable protection for young shrubs, nurturing healthy growth, leaving only a positive environmental legacy.**

NexGen shrub shelters can help you replace the use of plastic shrub shelters and nylon cable ties with a viable, environmentally friendly alternative.

The man behind the innovation is Gary Hurlstone, whose father Graham invented the Tubex Tree Shelter in the mid 1980's. Gary took his father's 35 year old design and set out to deliver a range of protection that performs at least as well, whilst being environmentally friendly and cost effective.

The shrub shelters are made from a special mix of British wool, a biodegradable polyol (made from ethically sourced cashew nutshell liquid and castor oil), and an innovative biodegradable custom polymer.



At its heart is a simple concept that has taken four years of extensive research and development, working with foresters, landowners and industry experts, to deliver the next generation in shrub shelters.

Scientifically proven as 100% biodegradable this is a shrub shelter that delivers the perfect environment for young shrubs to thrive in, without harming the environment.

**Benefits**

- Protects from browsing animals and creates a microclimate to promote healthy growth
- Wider diameter for shrub plants, easy installation – with pre-fitted releasable metal ties
- 100% biodegradable – no need for collection & recycling

**Installation**

Plant bare root or cell grown plant and insert stake next to plant. Install tube over plant, gently pushing into ground and tighten pre-fitted metal tie(s) around stake. See installation diagrams (pg 4) for more information.



**Specifications:**

Dimensions	
Height m	
Diameter mm	
Number of metal ties	
Type of ties	
Length of metal tie mm (inch)	
Height of top tie from ground mm	
Height of bottom tie from ground mm	
Average weight/tube g	

NexGen Biodegradable Shrub Shelter		
	0.6	0.75
	130-160	130-160
	1	2
	Releasable	Releasable
	tbc	tbc
	tbc	tbc
	tbc	tbc
	tbc	tbc

Material	
Tube	
Tie	
Tube colour	
Service life	
Biodegradable	
End of life	
Recycling options	

For All Sizes	
Tube	British wool + biodegradable polyols
Tie	Metal
Tube colour	Natural
Service life	Minimum 5 years
Biodegradable	Yes
End of life	Leave tube and tie in situ
Recycling options	Recyclable strapping (cardboard) Compostable outer bag

Packaging	
Nest	
Bundle	
Bag or strap banded	

NexGen Biodegradable Shrub Shelter		
	4	4
	20	20
	Recyclable strap(s) & compostable bag	Recyclable strap(s) & compostable bag



Recommended support  
Recommended tools  
Mallet (for knocking in stakes)  
Ratchet twist tying tool (for tying metal ties)  
For beating up:  
Peg puller or screwdriver (to undo and re twist metal tie)

# NexGen Shrub Shelter Features & Benefits

## Plant Welfare



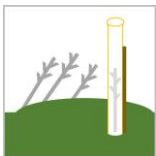
### Animal protection

Protects young plants from bark-stripping and browsing animals.



### Micro-environment

Ideal light transparency and spectrum to support photosynthesis and photomorphogenesis (plant form).



### Wind protection

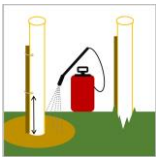
Delivers wind break effect, protecting plants on exposed sites.



### Reduced abrasion<sup>^</sup>

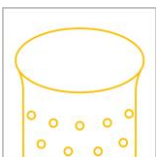
Flared rim minimises stem abrasion.

<sup>^</sup> Compared to no flare.



### Herbicide protection

Ties are 40cm from the bottom of the tube to prevent herbicides and pesticides getting inside the shelter.



### Shrub acclimatisation

Carefully positioned holes help the young shrub acclimatise and allow air to circulate.



### Auto shrub release

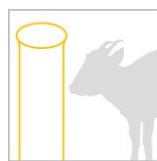
The shelter biodegrades to allow the shrub to break free, avoiding strangulation.

## Lifespan



### 5 years protection

Confirmed by independent weathering certification\* (depending on location, tree canopy, soil & microbes).



### Smooth surface deters rubbing

Animals can damage shelters when used as a rubbing post.



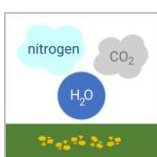
### Natural colour

The colour changes over time blending into the natural environment with no loss of performance.



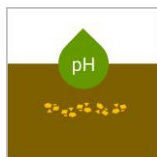
### Supports biodiversity

Over time, mosses and lichens grow on the shelters, supporting a rich biodiversity.



### No impact on environment

Breaks down as H<sub>2</sub>O, CO<sub>2</sub> and nitrogen, becoming a form of 'bug food'.



### pH and ecotoxicity neutral

Does not change soil pH levels when breaking down.



### 100% biodegradable

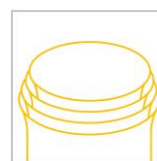
Because of the materials used, the NexGen range is 100% biodegradable.

## Installation



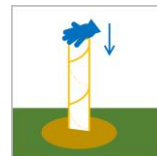
### Strapped and bagged

Bundled using *compostable* bags and *recyclable* strapping, for ease of transport and handling.



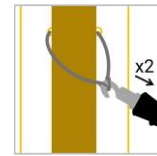
### Nested

For ease of movement around site.



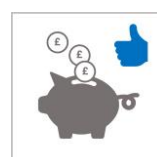
### Corkscrew spine

Delivers strength and longitudinal rigidity, meaning it can be pushed into the soil, discouraging burrowing animals.



### Releasable metal tie

Quick fastening with a ratchet tie twister tool, the metal ties will degrade over time and can be untwisted for beating up.



### No removal needed

Save money – no collection or recycling needed.

\* "After extensive testing Impact Solutions can confirm that the NexGen unique combination of materials will biodegrade. At around 5 years the tree shelters will start to break down resulting in neutral pH and ecotoxicity, and will become food for micro-organisms."

Steven Burns  
Impact Solutions, Scotland

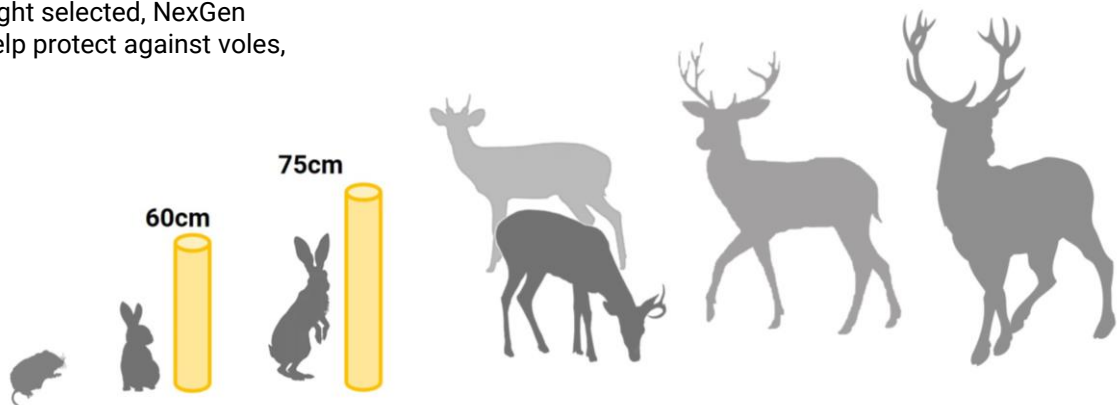
# NexGen Shrub Shelter Range Choices

## Height

Identify which damaging agent (animal) you wish to protect your plants from.


This will influence the height of your protection and the wooden stake to support it.

Depending on the height selected, NexGen Shrub Shelters can help protect against voles, rabbits and hare.



Protecting against	Vole	Rabbit	Hare	Muntjac / Roe Deer	Fallow Deer	Red Deer
Minimum height of tube for protection	20cm	60cm	75cm	1.20m	1.50m	1.80m
Height of supporting stake*	Not required	75 or 90cm	90cm	1.20m or 1.35m	1.50m	1.80m

\* It is advisable to use a longer stake for sandier, lighter soils.

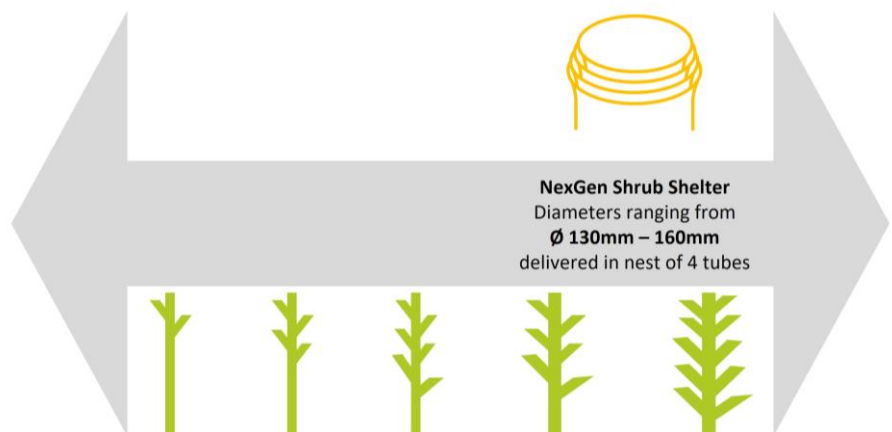
NexGen Shrub Shelter Available Sizes 

## Diameter Types

Tubes are nested (one inside the other), to save space and time when moving plant protection around a site.

Diameters describe the range of diameters you will find in a nest of tubes, from the smallest to the largest.

NexGen Shrub Shelter tube diameters range from 130mm up to 160mm in a nest and are suitable for medium to bushy plants (ie not slim whips).



## NexGen Shrub Shelter Installation

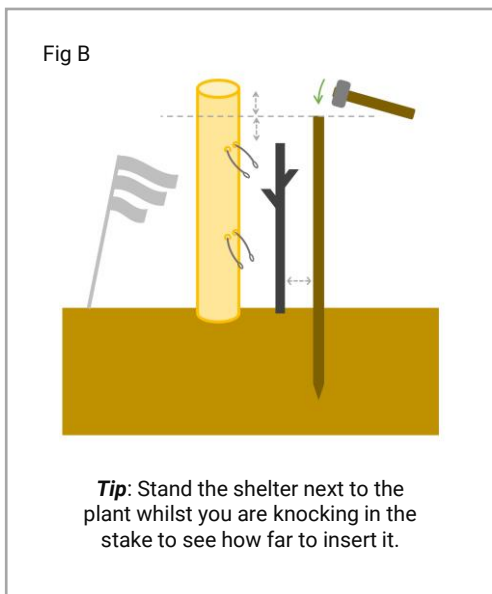
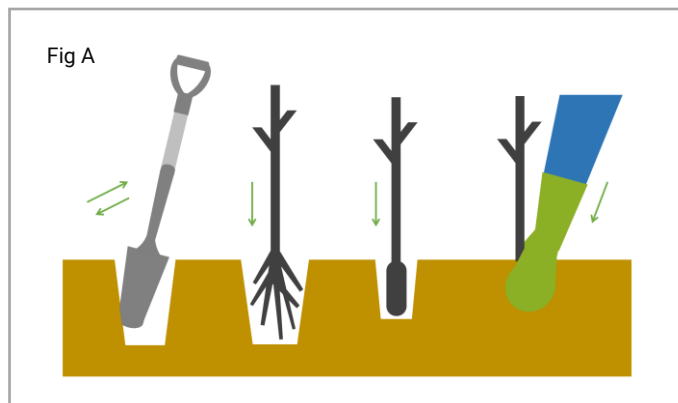
### PLANT

Planting bare root or cell grown plants is a straightforward task, however, do not attempt to plant if the ground is frozen or waterlogged. Find a suitable position for your plants, bearing in mind future growth and potential height and spread at maturity.

Bare rooted or cell grown plants can be 'notch' planted in 3 steps (Fig A):

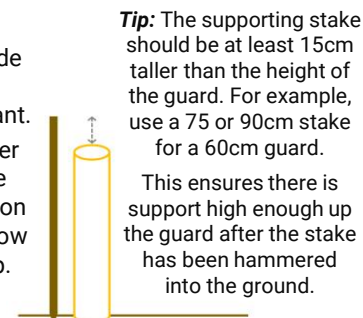
1. Begin by inserting the blade of a spade into the ground. Push the spade handle away from you and then bring it back towards you. Once you remove the spade, you will see that you have created a cavity or 'notch' in the ground.
2. **For bare root** - place the plant roots within the cavity and shake to ensure that all of the roots are in the cavity and pointing downwards.  
**For cell grown** - place the cell gently into the ground. Ensure the top of the plug (the soil surrounding the roots) is positioned at 2 to 4cm below the surface to avoid drying out.
3. Fill the cavity with soil. Use your heel to firm the soil around the plant to remove any air pockets. Once planted, give them a good water if practical to do so.

You are now ready to install your support and protection.



### SUPPORT

1. After planting, position the tube on the windward side if there are strong prevailing winds (Fig B), and the stake between 2cm to 5cm from the base of the plant.
2. Hammer the stake into the ground with a stake driver or mallet (ideally knocking 1/3 of its height into the ground). Ensure it is vertical (particularly important on sloping ground). The top of the stake should be below the top rim of the shelter and above the top tie wrap.



### PROTECT

1. Position the shelter over the shrub (Fig C), making sure not to damage any lateral branches, positioning the releasable metal ties either side of the stake.
2. Push the shelter into the ground 1cm to 2cm. This forms a safe herbicide barrier and deters vermin from burrowing under the shelter.
3. Use a ratchet tie twister, screwdriver or peg puller tool to twist tie the metal tie around the stake, ensuring the shelter is firmly positioned. *Note – if using a ratchet twist tie tool – the metal tie only requires two short pulls to be tied.*
4. Bend the metal tie downwards for neatness and to deter rubbing by deer or sheep.

