Planting hedges

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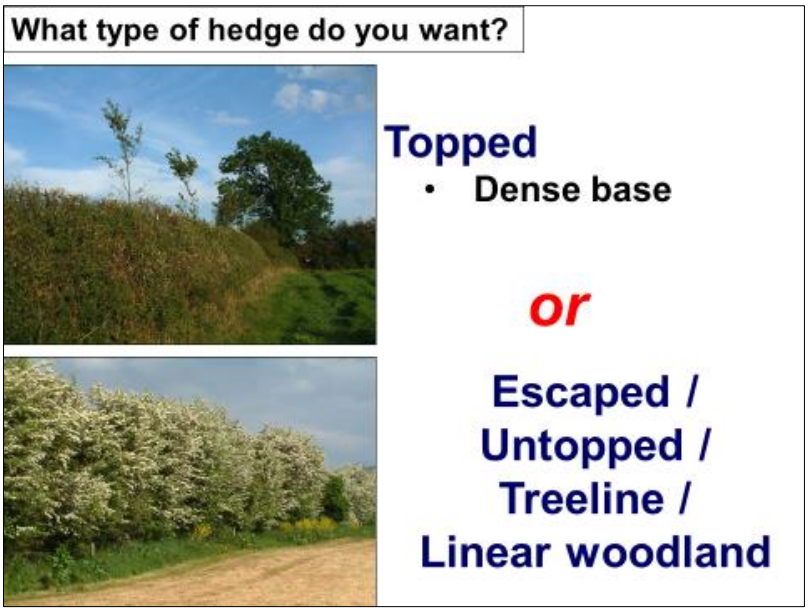
New hedges are a valuable asset on a farm, leaving a positive legacy for the next generation

Which type of hedge?

When thinking of planting a new hedge, you must first decide if you want a hedge with a dense base that will be regularly topped **OR** if you want a line of trees that will never be topped.

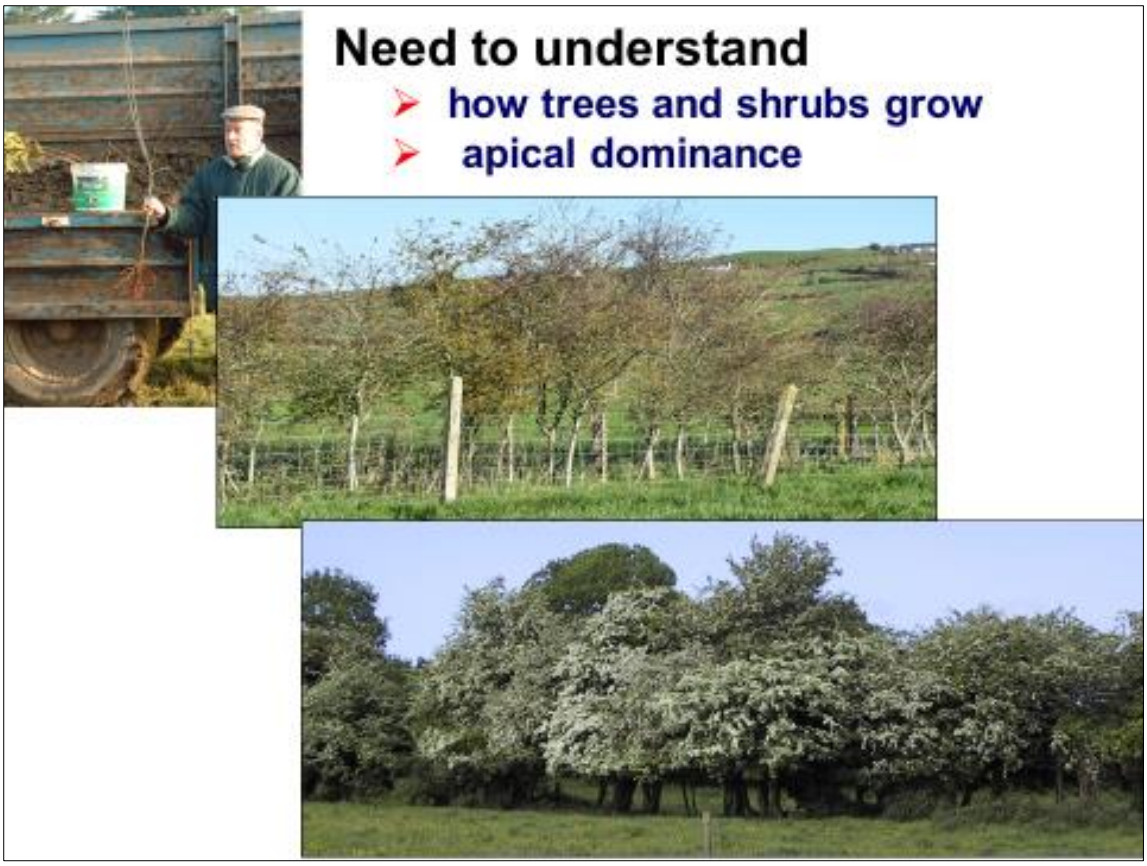
There are two distinct hedge types in Ireland. Both types are good, but each requires totally different management. A lack of understanding of each hedge type leads to inappropriate management and damage to hedges. Ideally each farm should have both types of hedges present – to maximise biodiversity benefits.

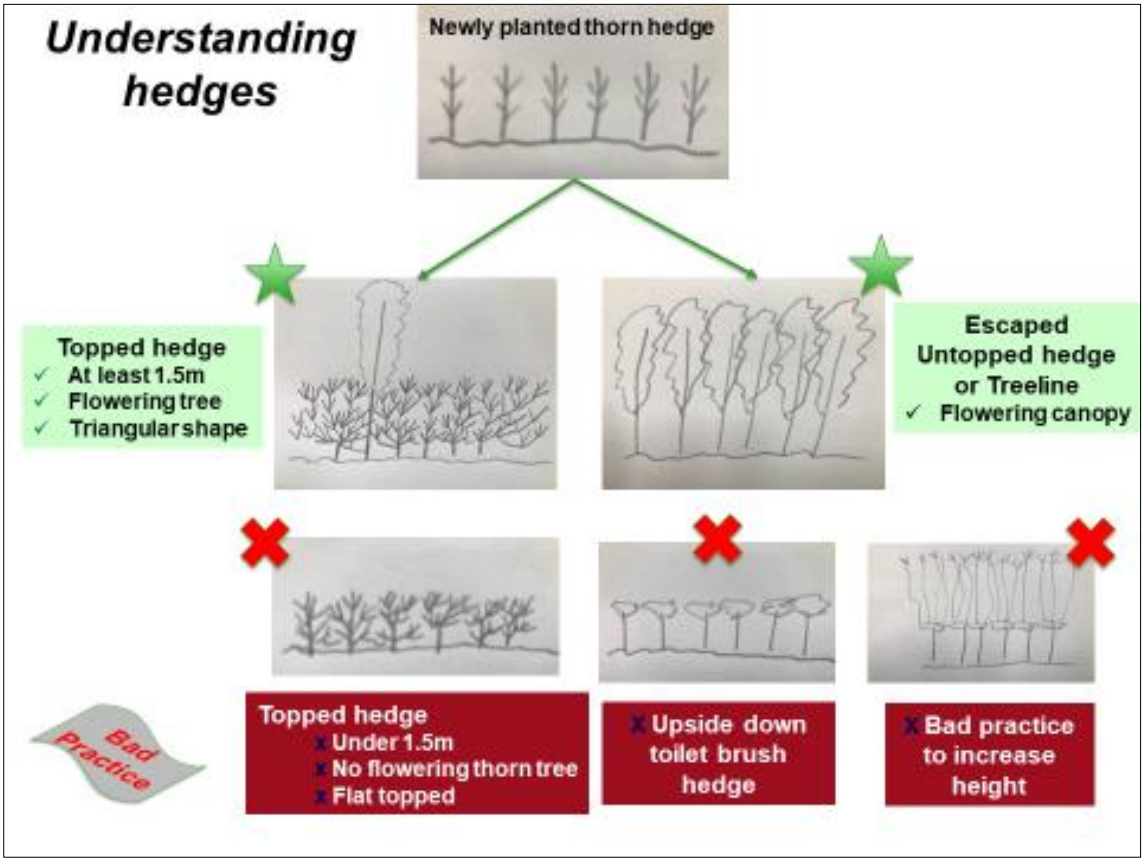
1. Escaped (untopped) hedge or treeline: Do NOT top. Side trim only
2. Topped hedges: Top to maintain as a hedge – a little above the previous years cut. Aim to grow up to at least 1.5 m and retain a new thorn tree in every hedge



Do not top an escaped hedge and do not let a topped hedge escape!

Before you plant a hedge it is essential to understand how trees and shrubs grow. The leader or central shoot of a tree is destined to grow up, causing the tree to develop into a single bole bole stem with a canopy. This occurs because of apical dominance which is the phenomenon whereby the main, central stem of the plant is dominant over other side stems. When apical dominance is broken by or pruning, lateral and dormant buds just below the cut fight to become the new terminal leader. Hedges are managed habitats and need management to be maintained


Need to understand
how trees and shrubs grow
apical dominance

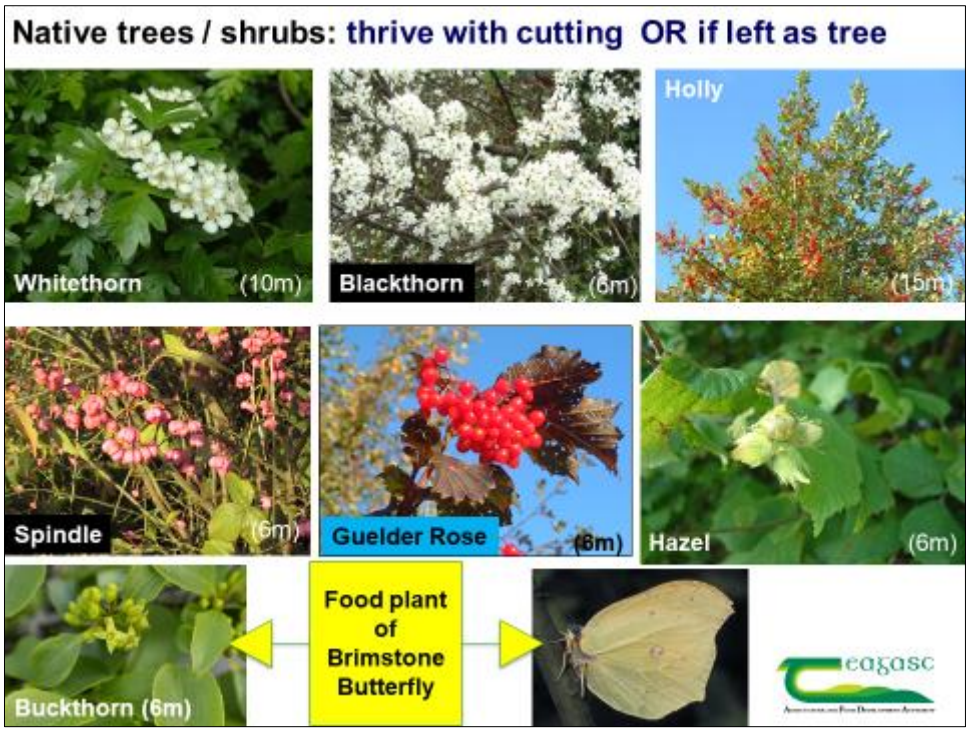

Understanding hedges
Newly planted thorn hedge
Topped hedge
At least 1.5m
Flowering tree
Triangular shape
Escaped Untopped hedge or Treeline
Flowering canopy
Bad Practice
Topped hedge
Under 1.5m
No flowering thorn tree
Flat topped
Upside down toilet brush hedge
Bad practice to increase height

What species?

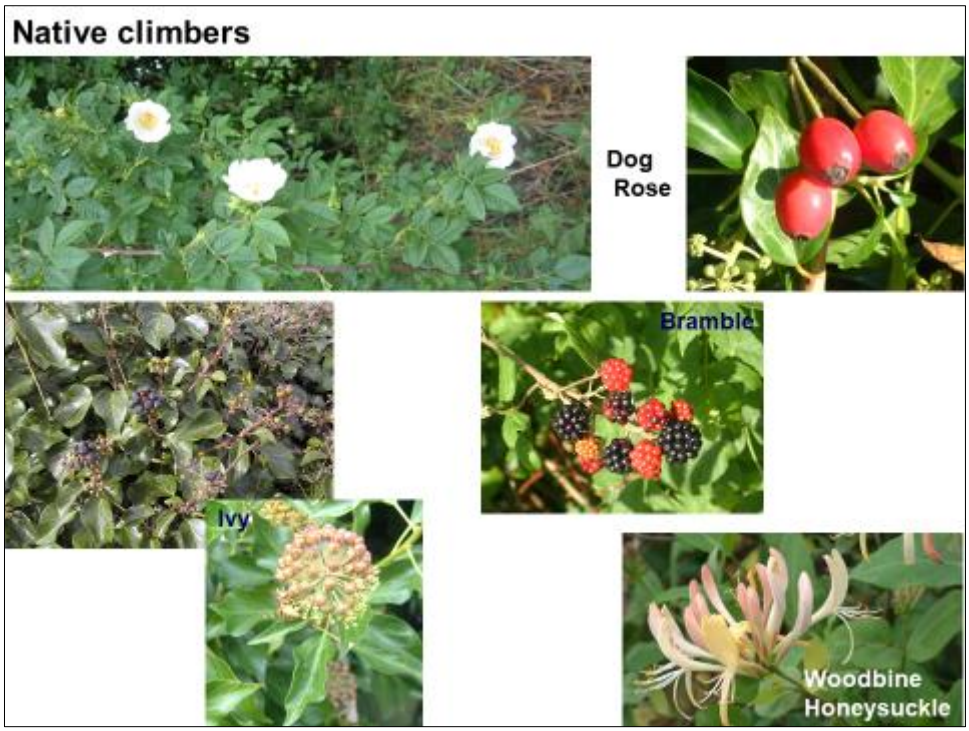
Plant native species of native Irish provenance. This means the plants were grown in Ireland from seed collected from Irish trees. Species native to Ireland grown in another country from their seed act differently. Native Irish species are in tune with each other with timing of flowering suiting associated dependent species. Using native provenance hedging stock is better for biodiversity, reduces the health risk to our native trees and hedges. It also supports local rural development.

Trees and shrubs that tolerate or thrive with trimming such as the thorn species – whitethorn, blackthorn and holly are excellent for the structure in hedges and should be the basis for all farm hedges. Such species are the only ones recommended in topped hedges as they are also ideal to provide the occasional mature tree within the hedge without shading out and causing gaps as is common with larger hedgerow trees.

For a topped hedge - Buy 2 year old bare rooted whips, 6 plants per m, mainly whitethorn, but once every 2 m replace one with another hedging species that tolerates trimming such as Blackthorn, Holly, Hazel, Spindle, Guelder Rose, Dog Rose and Woodbine.Therefore for every 100 m of new hedge - buy 550 whitethorn and 50 other these other species



Hedging species that thrive with appropriate trimming and provide small beautiful flowering trees within topped hedges



Native climbers will colonise over time – be careful not to plant ornamental varieties

Trees in hedges

The escaped or untopped hedge or treeline can contain any of Ireland's native trees. Large trees are commonly found in our hedges and can be planted in new hedges provided the site is suited to their height when mature. Mid-sized trees may be more suited. Remember – any of these trees must not be topped any stage or it will destroy the hedge and the tree.

Within the Topped hedge, because it is important to allow occasional plants of each of the hedging species such as whitethorn to mature into a hedgerow tree – there may be no need to include additional trees. Frequently where a lot of tree species are included in a new hedge mix, many are subsequently topped and destroyed, and it is also likely that no whitethorn trees are allowed to grow up.





Best practice hedge planting

- Mark out the line of the new hedge using wire, twine or lime
- Cultivate with a digger or mini-digger - to make it easier to plant and give plants a great star





- Protect roots from drying out during planting by keeping plants in the bag until needed



If hedging plants need to be stored for a few weeks – heel into a hole in the ground.

- Plant in a double staggered row – with 330mm (just over a foot) between the rows and the same between the plants within the rows – often the length of a boot




- Plant to the same depth as was previously planted. Don’t bury the stem or expose the roots

- Firm in

- Identify a few whitethorn (maybe 5 / 100 m) to be retained as trees and protect with tree guards or shelters

- Prune all other plants except holly down to an inch or so above ground level with a sloping cut to leave a sharp point






Thorn tree identified at planting maturing within new hedge

- Push a 4 foot or 1.2m wide strip of compostable film or used silage plastic down neatly over the cut stumps.

- Press the edges of the plastic into the ground to hold it down



- Protect from livestock including rabbits *if* necessary. The aim is to remove that wire in a few years



Single strand electric fence ideal with cows or adult cattle



Low level temporary electric wire may be needed if rabbits are a problem.

Second pruning

Where plants were pruned immediately after planting down to an inch or so above ground level with a sloping cut to leave a sharp point and pushing a strip of compostable film or used silage plastic down neatly over the cut stumps, new sprouts will have appeared just below the cut stump resulting in approximately 5 stems growing up instead of one. During the first growing season, these 5 stems will grow up maybe a half a metre. The next step is to carry out a second pruning after the first growing season during the dormant season in winter. This involves cutting each of the 5 stems back down to within an inch or so above the previous cut, which will result in the multiplication of the 5 stems into 25 stems close to the ground where we want the dense growth. With a new hedge, it is not a race to the top, but rather letting it inch its way up year by year. At planting, a number of thorn saplings should have never been identified for retention as trees and should have been protected with a tree guard and left uncut. It is important to look out for these future thorn trees at second pruning and again leave them uncut.





Left: New hedge sapling cut at planting showing how shoots sprouted just beneath the cut and grew up during the first growing season

Right: Second pruning of the hedge showing the cutting of the cutting of the multiple stems an inch or so above the first cut

Further information:

- Planting Hedges webinar https://www.youtube.com/watch?v=echOezcKvMM
- How to plant a hedge https://www.youtube.com/watch?v=CgtUP2VdILI
- REAP Specifications for new hedges https://www.gov.ie/en/service/64388-results-based-environment-agri-pilot-programme-reap/#terms-and-conditions-and-other-documentation