

# Northern Highbush Blueberry Pruning Tips

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## Why prune?

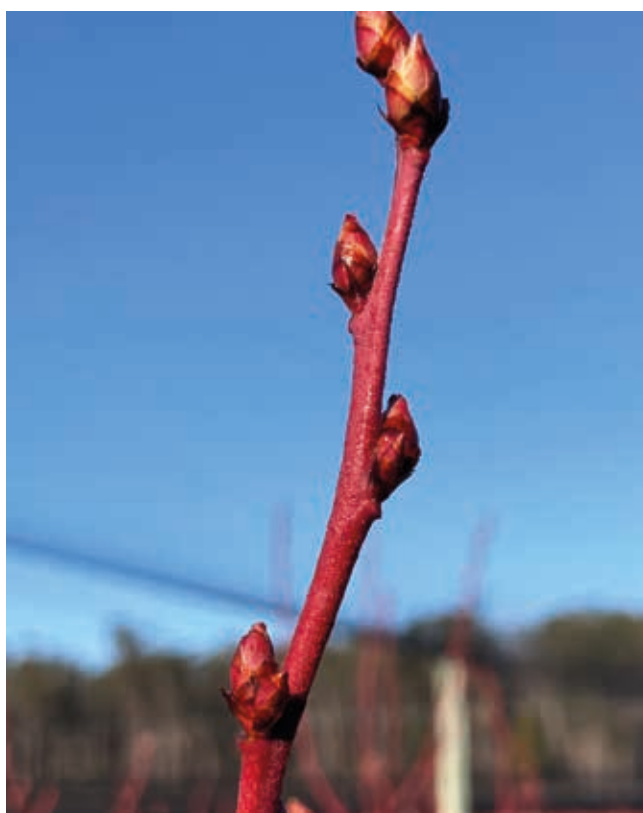
Winter pruning is a crucial part of the annual cycle in northern highbush (NHB) blueberry to balance vegetative and fruiting growth for the upcoming season.

Insufficient pruning (i.e. not enough fruit buds removed) can lead to excess fruit load on the plant, resulting in small berries and insufficient plant resources to encourage new shoot growth and support developing fruit. This results in weak shoot growth in spring, which becomes the following season's fruiting wood, leaving poorer laterals and wood to prune to next season.

Alternatively, too much pruning can lead to lower yields and excessive vegetative (leaf, shoot) growth. Getting the balance right can be a challenge but is important to the ongoing success of long-term NHB blueberry production.

## When should I prune?

Winter pruning should ideally occur when plants are fully dormant. Waiting until after the majority of leaf fall in deciduous varieties helps to better visualise which laterals and material to prune to.



(L) Blueberry fruiting buds starting to swell in late winter; (R) vegetative buds remain dormant

## Strong vs weak growth

Northern highbush blueberry plants produce fruit buds on one-year-old wood, on shoots grown the previous spring. The best quality fruit is generally produced on longer, more productive laterals, thicker diameter laterals generally produce larger berries. Short, thin 'twiggy' laterals produce small, poor-quality fruit and should be pruned out. If your plants have predominantly strong healthy laterals, this indicates they likely have sufficient resources for vegetative growth and fruit development. However, even healthy plants need to be pruned to maintain vigour and allow light, airflow and space for new growth.

In many varieties, it is also important to maintain plant vigour and encourage new growth from the plant base by removing some older canes each pruning season. This provides space for new canes to grow and helps to reinvigorate the plant. New wood is generally smooth and brighter in colour (e.g. red, green), while older wood is lighter grey in colour and lignifies (becomes woody) with age, with canes increasing in diameter over time. Prioritise pruning out larger thicker canes to prevent overcrowding at the base.



**Retain strong productive laterals and prune out the weak twiggy growth**

## Why do plants produce lots of short weak growth instead of strong laterals?

Lots of short twiggy growth with minimal strong laterals can often be an indication of insufficient pruning the previous season.

Insufficient pruning results in too many fruiting laterals being left on the cane, leading to overcropping, depleted plant resources and poor shoot growth in spring.

Plants with lots of weak twiggy growth should be pruned back to reduce crop load and reinvigorate the plant. This will reduce yield for the upcoming season but aims to create healthy vegetative growth to develop buds and support yield the following season.

If poor vigour plants are not pruned back sufficiently over a number of years, they will fall into a continual cycle of overcropping and weak growth, draining plant resources and reducing vigour over time which is difficult to remedy.

## Blueberry pruning tips

- Remove dead or diseased wood first, making sure to sanitise tools afterwards
- Remove old unproductive canes with poor growth by cutting them out entirely or cutting back to strong productive wood
- Remove old fruited wood
- Thin the number of new canes from the base as these will quickly overcrowd the plant
- Prune to create an open plant centre to improve light penetration and air circulation
- Prioritise strong productive laterals that will produce good quality fruit and remove thin short twiggy laterals
- Allow space between laterals for light penetration and new shoot development in spring
- Thinning of laterals is important to prevent overcropping, even strong ones
- Remove low-lying branches with fruit that may touch the ground at harvest
- Manage plant height by pruning down tall canes which will be difficult to pick at harvest



**New wood is smooth and bright in colour (red in this photo), while older wood is grey and lignified**



**Old fruited wood that should be removed when pruning**



**Unpruned upper canopy with high density of fruiting laterals and old fruited wood**



**Pruned cane leaving strong productive fruiting laterals**