

How to Grow Cultivated Walnut & Carya Trees

The right place to plant?

The best way to succeed is to **plan before you plant**. Do you know where you want to plant your new nut trees? Avoid many future problems by considering all aspects of the planting spot, such as:

Cross-pollination, even self-fertile trees benefit from extra pollination, other walnuts within a few hundred metres will help. Check out the surroundings, do you have space for a mature tree(s) and avoid areas when root runs will fall foul of paths, patios, sewer lines, water pipes and so on. Walnuts need less room (but allow 8-10m) than Heartnuts & Carya cultivars (allow 12-14m between).

If you have the space plan for any future trees when you first plant as you can't change it in future years, Juglans & Carya have tap roots and hate being moved, you'll be very lucky to succeed.

Avoid frost pockets at the bottom of slopes, higher up a gentle slope is ideal as the frost will flow downhill.

Cross-Pollination

Is a pollinator variety present? Cross-pollination by a different variety, of the same species of tree is key to the success of many nut trees. In most cases, its absence is why trees don't bear nuts or produce poorly. Some nut trees are self-pollinating (Self-fertile) but will yield a larger crop if pollinated with another variety.

Many cultivated Walnuts or Carya will have recommended pollinator Cultivars that flower at the appropriate time.

Sun and Good Soil

Your tree would love a sunny place with well-drained, fertile soil. But it will be quite satisfied with six to eight hours of sunlight. Good drainage is required to keep your trees "happy." If your soil has high clay content mixing some soil conditioner in with the soil will help get the tree off to a good start. Walnuts won't survive in wet boggy sites.

Nut trees require fertile soil for good growth, so before you plant, check your soil nutrients and pH. For walnuts, your ideal soil pH should be 5.0-7.5. with moisture retentive soil (not wet!) and sufficient nutrients & minerals.

Squirrels

Keep clear of adjoining fence lines or trees/shrubs that will allow them to jump into your prize tree, a simple 1m deep piece of tin or plastic wrapped around the tree at the right height in the autumn will keep them off!

Planting

Successfully establishing a young nut tree starts with your planting site and method. Once a tree is established, it needs little assistance to grow and produce; but you'll want to make sure you give your tree the best foundation possible. Planting can be done at any time that the ground is not too wet or frozen, ideally November to February.

Dig a square hole twice as wide and deep enough to accommodate the root system, break up the bottom of the hole, incorporate some well-rotted manure, garden composts etc and add mycorrhizal medium such as **Rootgrow**. Wet the roots thoroughly before planting, stand in a bucket of water for a couple of minutes

Many nut trees have just one main root, be careful not to damage it when removing the pot. Water the hole well and place the de-potted tree at the same depth it was growing in the pot. Refill hole with soil, tamping as you go but don't over compact the soil. Do not backfill over the collar or graft, water well.

Small trees shouldn't need staking but they will probably need a cane and careful training to ensure you get 1 strong leader.

Mulch an area of at least a 1M diameter circle with any mulching material to keep the soil moist and competition down. Keep the mulch replenished and all weeds away from trees and remember to water/irrigate for the first few years whenever necessary, remember that if you see wilted leaves it's way too late. Juglans / Carya will not normally need watering after a few years unless the weather is exceptional. Potted nut trees do not need pruning unless you have any damaged branches.

Make sure you protect the tree from frost in the early years (fleece is good) and from rabbits, deer and any other grazers all year around!

Fertilizing

Fertilize your tree in the spring with a well-balanced fertilizer. Sprinkle the fertilizer at the drip line of the tree. Use about 2 oz (small handful?) of a balanced fertilizer (eg 15:15:15 or similar) when the leaves are out in May.

Disease

Walnuts and *Carya* are generally very healthy trees but some cultivars can be susceptible to Walnut Blight or Anthracnose, both only really occur in very wet springs and infect young growth and/or nuts, a well-ventilated site will help. Always clear away fallen leaves and don't compost them, if a tree is regularly affected then take advice, best to choose disease resistant varieties when you can.

Anthracnose

Causes irregular purplish or reddish-brown spots on leaves and these spots may merge to form irregular shaped blotches. Although significant defoliation may occur after cool, wet spring weather, this disease is usually not serious to the health of the tree.

Walnut Blight

Black, dead spots on young nuts, green shoots and leaves. Many nuts fall early but some will reach full size with husk, shell and kernel black and ruined.

Pruning

Most potted nut trees need very little initial pruning, but as the trees get older, corrective pruning may be necessary. Keep these pointers in mind:

When the tree is dormant, corrective pruning consists of removing broken, interfering, dead, or disease branches. Remove limbs and vigorous shoots growing through the centre, to allow light and air to penetrate.

Walnuts are best pruned mid-summer to early autumn or mid-winter, avoid either side of dormancy or spring.

Harvesting

Harvesting will generally start 3-7 years after grafting from September through to November depending on the variety and growing conditions. Most nuts will fall automatically but some may hang on and need shaking or knocking down. You must gather them off the ground as soon as they fall and remove the hull straight away, leaving them for a few days will spoil them.

Drying

Walnuts, Heartnuts, Hicans & Pecans - Before drying, remove the hull, use gloves to protect your hands from stains.

Butternuts - The hull does not need to be removed before drying. As the butternut hull dries, it crumbles and any that remains after the drying process is complete can be easily removed with your fingers. Make sure to rinse the hulls with water before drying to remove the tannin, otherwise the tannin will penetrate the shell and spoil the kernel.

Spread the hulls or shelled nuts in a single layer to dry, use a shady area with good air circulation, drying time will be 1 to 4 weeks, don't over dry them though!

Giant walnuts and some regular ones are best eaten green (ie when they've fallen and before drying) within a few days, they have low oil content and will not store and have been bred to be sweet when green.

Some heartnut trees tend towards a biennial bearing cycle; they will have a heavy crop one year followed by a light crop the next year.

Storage

Left in their shell, nuts will keep for several months in a cool, dry area. Alternatively, you can shell nuts and refrigerate them for several months or freeze them for longer storage. Some walnuts will keep in their shells for a year or more.