

## Propagation of Your Existing Plants

Propagation is a method to grow new plants from existing plants. It's a cost-effective way to expand your garden and share with friends. Unlike seeds, you get the same genetics or traits that the parent trait has. Overgrown plants benefit from digging and splitting large plants.

**Timing:** For most, the ideal time to propagate shrub type plants is while they are dormant (mid winter until early spring) but other times of the year can be successful.

**Sanitation:** Use clean tools to prevent disease transmission, don't use diseased plants.

### Propagation Methods

**Saving seeds:** any plants or flowers that produce seed can be spread by growing the seed, though seeds of trees can be difficult, some other methods can be easier (not covering seeds)

**Division:** any perennial plants that grow bulbs and roots can be divided to make extra plants.

- Ex: Daylilies, iris, comphrey, astilbe, bleeding heart, hosta. Best done in early spring before it fully leafs out. Gently lift out of ground, divide by pulling apart, or cutting with a sharp knife or spade, replant in new location after prepping planting area with fresh compost, water well.
- Spring bulbs multiply over several years (tulips, daffodil, etc.). Leave plant to naturally die down after flowering. Dig late summer and replant with new spacing, amending the soil.
- Not all flowering bulbs over-winter ie. gladiola and canna lily - these need to be lifted in the fall before a heavy frost and stored indoors during the winter. New bulbs grow from this season's bulb that becomes spent - remove the old bulb and retain the new ones.

**Layering:** small flexible stems, lower plant stems can be secured to the ground with U pins or pegs after removing all leaves - leave the tip of the stem exposed and cover with soil. Roots form over time where touching the ground - once rooted, cut the stem from the mother plant. This works well with strawberry babies and spider plants that have yet to form roots.

**Cuttings:** From woody plants like fruit trees and shrubs, ornamental bushes, roses, etc. Herbs: many herbs can be propagated from existing plants. Flowers: geraniums, vining plants, and those that make 'babies' can all be propagated from the existing plant

- Cut a healthy section of stem below a leaf node. For some plants is important to identify the tip end of the stem (cut root end at an angle, and tip end straight across). Ensure there are several nodes on the stem (several cutting can be taken from one long dormant stem). If in leaf, trim lower leaves and remove flowers or fruit. Keep stems 4-8 inches long
- Available aids: rooting powder, (3 types available for soft stems, semi woody, and woody stems), or natural alternatives: ground pure cinnamon, aloe vera gel, willow tree twigs chopped and soaked in water for several days.
- Dip the cut end (root end of stem) into water then, into rooting powder or alternative.
- Place cutting in a pot with moist potting mix, vermiculite, or perlite.
- Alternatively, keep cutting in water (with or without willow water) and wait for roots to start growing.
- Keeping in a plastic bag with high humidity can help.

- Keep in indirect light and water as needed until roots form.

### **Planting your rooted cutting**

Once roots have formed, carefully plant the cutting trying not to break the fragile roots. Your plant will need lots of TLC before it becomes well established. In the heat of summer, potting up in a pot and keeping it out of direct sun and well watered is recommended. Early in the season, make sure all danger of frost is past, plant and keep well watered until growing well. Late in the season, keep well watered and protected until freeze up.

### **Propagation Tips**

- Raspberries and blackberries: easiest method is to remove baby plants that form beside the main plant
- Hazelnuts: need 2 plants for cross pollination, take a cutting from hybrid, the nuts can be used for non hybrid
- Grapes: very important to know which end is the root end. Can take cuttings late fall just before it freezes and put them directly into the ground to root in the spring.
- Most mints root in plain water very easily, for many herbs, seeds are easier.
- Geraniums do best with cuttings, rooting powder and potting soil
- [https://extension.umn.edu/planting-and-growing-guides/dividing-perennials\(pdf\)](https://extension.umn.edu/planting-and-growing-guides/dividing-perennials(pdf)) large variety of plants with specific information, Wild plants also listed, I advise you leave these alone in the wild.