



# FACT SHEET

## **Growing Native Trees From Seed**

What an exciting thought— to see a tree you planted and grew from a seed reaching for the sky just a few years later! Yes, it is more difficult to grow and nurture a tree from seed, but what a big accomplishment!

Starting young trees from seed is also an excellent project to teach young children about the cycle of life and the importance of making our environment a better place to live. It is a great classroom, scout, 4-H or other youth group project.

We have lost and continue to lose many of our urban and suburban trees. Foresters report that only one tree is planted for every four lost. Planting native trees yields many benefits - environmental, economic, social and aesthetic. Native trees are better adapted to the local environment and usually live much longer than imported trees because they have become acclimated to the local climate and other conditions over centuries.

The following four steps must be completed for a new tree to successfully sprout and grow.

1. Collecting the seed.
2. Cleaning, processing and storing the seed.
3. Preparing the seeds for planting.
4. Sowing or Planting the seeds.

### **Collecting the Seed**

It is best to collect the seed from within 50 to 100 miles north or south of your location. This insures that the parent tree was acclimated to your area and is truly “native.” Choose your seed from trees that are healthy and flourishing on a site similar to where you plan to grow your tree. For example, acorns from an oak tree growing on a moist, north-facing slope may not grow well on a dry, south-facing slope. The right time to collect seed is just before or just after they begin falling from the tree.

### **Cleaning, Processing, and Storing the Seed**

Tree seeds come in a lot of different forms. Some are in fruits or berries, others in cones, while others are in husks or pods. All should be removed from their protective covering before storage to prevent potential mold. Since almost all seeds are collected in the fall and planted in the spring, storage is necessary. Let the seeds air-dry for a day or two; store them in an airtight container in a cool place, like a refrigerator, at 33 to 36 degrees Fahrenheit.

### **Preparing Seeds for Planting**

Most fall-ripening seed will not sprout until the following spring; it is best to store them as mentioned above. They can be planted in autumn, just after they fall from their parent tree. However, expect that many of them will be lost to insects, mice, squirrels and other critters. Many seeds require going through a process called



“stratification.” This process of going through the cold of winter can be simulated in most refrigerators. To stratify seeds, place them in a moist material (sand, peat moss) at a temperature near 32 degrees for several weeks. This duplicates the process found in nature as the seeds overwinter in the mulch of a woodland.

Some seed, like walnut, hickory or coffeetree, have very hard coverings and must be “scarified” before planting. This “scarification” can be done by soaking the seed in sulphuric or other strong acid, or removed mechanically with a file, hacksaw, sandpaper or similar device. The idea is to break the seed coat so that the moisture necessary for germination can reach the inside of the seed.

### **Sowing or Planting the Seed**

Although seeds can be planted directly in the location the tree is desired, the best results are obtained when they are planted in seedbeds or pots. They can then be transplanted to the desired locations. A sandy, loamy soil mixture is best for the seedbed. The greatest results occur when good lighting conditions are present, either natural or artificial plant lights. Keep the seedbed or pots moist but not waterlogged. A tried and true method for planting some of the hard-coated seeds like black walnut and coffeetree is to scarify the seed with a file or hack saw and plant the seed about 4 inches deep inside a number 2 metal vegetable can. Cut one end out of the can and put a couple of large holes in the other end with a drink can opener. Dig a hole about 4 inches deep, place the seed in the hole and then push the can, open end down, over the seed. This will prevent squirrels from digging up and eating the seed. When the tree sprouts, the trunk will emerge through one of the holes in the top and the can will rust away.

### **Summary**

Growing trees from seed is an exciting, yet challenging task. Some trees, like redbud and maple, seem to sprout up in any location with little difficulty. Others, like coffeetree, take a lot of care in scarification, stratification and several weeks or months of patience to see results.

Since each species requires different methods for success, it is best for the interested beginner to study in preparation before starting the process. Look for books in libraries. Also, search the Internet for forestry departments at major state universities. Blogs are a good source to find postings of the results of individuals’ efforts and their valuable guidance. As one blogger wrote, there is nothing like “growing a memory” that a youngster can see for a lifetime.