

TREE SEED SOURCING 101



Thank you for being a steward of future forests by joining our seed collection efforts to support the Maryland Forest Service's John S. Ayton State Forest Tree Nursery in Preston, Maryland. Be on the lookout every fall for any of the following tree species listed in Table 1 (reverse).

Materials

Burlap bags or paper lawn/leaf bags, gloves, tarp, rake, and enthusiasm! Remember, look out for yourself when collecting seed. Pack food, water, sunblock, bug spray, and other essentials. Wear long sleeves and pants when collecting seed to minimize the risk of ticks and protect from briars.

Collection

Get seed as soon as it is mature and be sure to inspect! No cracks, dried-out looking seed or seed with holes from wildlife damage such as insects. When tree seed falls from a branch, most of the time it has ripened, and it is best to collect soon after that. Seed will over-ripen and not germinate well or be susceptible to insect attack if fruits or pods stay on the tree or ground too long. See Table 1 for more details.

Storage

All tree seeds need to be stored in a cool, dry place out of direct sunlight in a paper or burlap bag. Do not use plastic bags to collect seed as it can over-ripen and ferment. We do not recommend storing seed inside your home, as it can bring in bugs.

Delivery

It's best to collect and deliver seed within the same week. If you cannot deliver the seed yourself, contact Francis Smith or your local county forester to discuss other options.

Additional Notes

ACORN WEEVILS: Weevil eggs are laid in acorns in midsummer, and larvae feed inside the nut until fall. This damages the acorn, and it will not grow into a tree. Weevils leave a tiny hole in acorns. Keep a lookout for these when collecting!

Above: weevil from acorn



FLOAT TEST: If you have acorns of questionable quality, you can do the float test: put them in a bucket of water, save the sinkers and forget the floaters! Insect-damaged and dehydrated acorns typically have some air space inside the shell and tend to float.

Before collecting, consider the following...

- Are you allowed there, or do you need to get permission from the property owner or land manager?
- Do the trees there look healthy? *If a tree looks visibly unwell, the seed may not be viable.*
- Do you see enough seed to collect? *Check with Francis Smith to learn about weight quotas for different seeds. Note that certain trees do not produce seed every year.*
- If you're picking a tree with seed still on branches, are there **low-hanging branches** for easier collection?
- Is the ground around the tree relatively clear to work in? *(A site with low-cut grass or bare ground below the tree where tree seed has fallen is an ideal collection spot to lay down a tarp and gently shake a tree to collect seed and makes it much easier to rake up seed already on ground and gather as opposed to overgrown understory to pick through.)*

Questions? Contact Francis Smith with the Maryland Forest Service at francis.smith@maryland.gov.

Species Name	Identification	Collection Tips
Eastern Redbud; <i>Cercis canadensis</i>	Small tree that grows 20' to 30'. Heart-shaped leaves turn yellow in the fall. Pink blooms in early to mid-spring. Yields 3" green legume-like seed pods that later turn a brownish-black color.	Collect Redbud seeds when in the fall when the pods turn brown. Redbud seed pods can often become dried and shriveled. Examine the pods on the redbud before collecting: do they feel overly dry or thin? If you can't feel the individual seeds within the pod, do not collect seed from that tree.
Flowering Dogwood; <i>Cornus Florida</i>	Small tree that grows up to 25'. Dark green oval/ovate leaves are 4-8" long and turn red/purple in fall. Blooms white in April-May. Yields bunches of ¼" glossy red fruit in late summer/fall.	Collect Flowering Dogwood fruit in the fall, once the fruit skin is red and it begins to soften. These fruits are often eaten by birds and other wildlife.
Chestnut Oak; <i>Quercus Prinus</i>	Large tree that grows up to 70'. Dark green alternately arranged leaves are 4-6" long and turn orange/yellow in fall. Yields dark brown, long oval acorns 1-1.5" long with a thin cap covering less than 1/3" of the nut. Caps separate from the nut when mature.	Collect Chestnut Oaks in early fall, preferably within 3 days of falling from the tree. Chestnut oaks only produce acorns every 4-5 years. If fallen acorns sit on the ground for too long, they can spoil or attract pests like acorn weevils*. Use the "Float Test" to weed out spoiled acorns after you've collected them**.
White Oak; <i>Quercus Alba</i>	Large tree that grows up to 100'. Alternate simple leaves are oblong to ovate in shape, 4-7" long, and have 7-10 rounded lobes. Yields Ovoid to oblong acorns with a warty bowl-shaped cap that covers ¼ of the nut. The cap detaches from the nut when mature.	Collect White Oak acorns in early fall when they are green or just turning brown. At this stage, it should be difficult to remove their caps. White Oaks only produce acorns every 4-6 years. If fallen acorns sit on the ground for too long, they can spoil or attract pests like acorn weevils*. Use the "Float Test" to weed out spoiled acorns after you've collected them**.
Swamp White Oak; <i>Quercus Bicolor</i>	Large/medium tree that grows up to 80'. Dark green leaves are simple alternately arranged 3-7" long and obovate. The leaf edge has irregular blunt teeth. Yields small 1" acorns with a bowl-like cap that covers 1/3 of the nut. Acorns turn a light tan color when mature.	Collect Swamp White Oak acorns in early fall when they are green or just turning brown. Swamp White Oaks only produce acorns every 3-5 years. If fallen acorns sit on the ground for too long, they can spoil or attract pests like acorn weevils*. Use the "Float Test" to weed out spoiled acorns after you've collected them**.
Wild American Plum; <i>Prunus Americana</i>	Small shrub-like tree grows up to 30". Green leaves are paler on the underside, are 3-4" long, are alternately arranged simple ovate/elliptical with finely serrated edges and a pointed tip. Produces clusters of white flowers in early spring. Yields fleshy drupe fruit that is round, 1" across, yellow-brown to reddish-purple. Fruit ripens in mid to late summer.	Collect Wild American Plum fruits in late summer to late fall. Collect fallen fruit, or fruit still attached to the tree. Rotting fruit is ok to collect. Do not collect seed that is exposed, because it could be too dried out.
Paw Paw; <i>Asimina Triloba</i>	Small slender tree that grows up to 40' tall. Simple green leaves are alretnately arranged, are ovate to oblong, and are 5-11" long and 2-3" wide. Leaves have a pepper-like odor when crushed. Produces large fleshy green-yellow fruit that grow in bunches of 2-5. Fruit is 2 ½-4" long, has a tropical scent and banana-like texture with several large kidney-bean shaped seeds on the inside. Fruit ripens in late summer.	Collect Paw Paw fruit from September to October. Collect fallen fruit from the ground or give trees a gentle shake to release still attached fruit. Be cautious of fruit on the ground, as it can attract insects like wasps.
American Elderberry; <i>Sambucus canadensis</i>	Dark green oppositely arranged pinnately compound leaves are 6-11" long with 5-11 elliptical leaflets. Leaflets have serrated edges and acuminate tips. Bottom leaflets are often 3-lobed. Produces bundles of small white flowers in summer. Yields clusters of small ¼" berry-like drupe fruits that mature in late summer. Fruit is a dark purple-lack color.	Collect elderberries in August and September. Collect fruit by the cluster; you can use clean pruners and cut at the nearest node. Note that these fruits are a favorite for wildlife.
Beach Plum; <i>Prunus Maritima</i>	Short multi-stemmed shrub rarely surpasses 5' in the wild. Simple alternately arranged ovate to obovate leaves have a finely serrated edge and are 1 ½ -2" long. Produces small clusters of white flowers in mid-spring. Yields round fleshy red to blue-black drupe fruit up to 1" across. Fruit ripens in late summer.	