

WHITE OAK INITIATIVE: FROM SEED TO TREE

Our native white oak (*Quercus alba*) has been an anchor of the Maryland landscape and ecosystem for centuries. It is the state tree of Maryland, and a keystone species and a centerpiece and staple of the dominant forest type of our state, oak-hickory forests. With a range of increasing forest diseases and pests, and the additional stressor of climate change-driven extreme weather swings, white oaks are under siege and the ability to grow the next generation of trees has never been more important.

With this in mind, the Maryland Forest Service in collaboration with the University of Kentucky and the White Oak Initiative is putting the word out for acorn collectors to pitch in help collect white oak acorns every fall for the John S. Ayton State Forest Tree Nursery in Preston, Maryland. See the tips below to be a steward of the next generation of oak trees and our future forests!



HOW DO I KNOW IT'S A WHITE OAK?

White oak (*Quercus alba*) can grow to 100 feet tall, with round lobes for leaf tips and whitish bark.



COLLECTION TIPS:

Collect White Oak acorns in early fall when they are green or just turning brown, since this species germinates almost immediately. At this stage, it should be difficult to remove their caps. They will produce more acorns every other year typically, often in alternating rotation with any surrounding red oak trees.

If fallen acorns sit on the ground for too long, they can spoil or attract pests like acorn weevils (see pic below). Use the "Float Test" to weed out spoiled acorns after you've collected them.

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!



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.

STORAGE & DELIVERY: 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, it's best to collect and deliver seed within the same week.

Contact your local Maryland Forest Service office for delivery instructions by calling 410-260-8531 or search the contact page here: <https://dnr.maryland.gov/forests/Pages/contacts.aspx>.

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?** *Certain trees may not produce seed every year!*
- **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.)*