

# HOW TO:

## COLLECT AND PLANT NATIVE NUTS

### SIMPLE PROJECTS FOR CONSERVATION

With autumn comes an abundance of acorns, walnuts, and other nuts strewn across the ground. These native seeds can be collected and put to good use. They can be planted in areas where more trees are needed, or they can be raised for seedlings that can be used by your chapter or other groups in conservation projects.

Ikes at the Hamilton Chapter in Ohio have been doing this each year. They organize a community nut donation site, and they plant the nuts to distribute seedlings to interested groups. Similarly, Maryland Ikes work with the Potomac Conservancy's Growing Native program, which coordinates volunteers who collect nuts and give them to state nurseries for propagation. These nurseries face a shortage of seedlings due to a growing demand for native trees for everything from riparian buffer projects to reforestation. The nuts that people collect for the nurseries replenish the region's tree supply.

Find out whether any organization in your area already has a system for nut collection and delivery. If not, consider organizing one at your chapter. Here is some information to get you started.

#### Materials

- Burlap, mesh, or paper sacks
- One-gallon resealable plastic bags
- Air-tight plastic storage containers
- Peat moss
- Large plastic tub
- Wire screens
- Bricks
- Long stick or narrow rake
- Old newspapers
- Plastic grocery bags or newspaper sleeves
- Rubber bands

#### 1. Looking for nuts

First, find out whether the nuts you will be collecting are from a tree that's native to your region. Check with your state department of natural resources or a local nursery for a list of native trees. White oaks, for example, are native throughout much of the country and produce one of the most commonly found acorns. The Ohio buckeye is an American native, but the buckeye-like horse chestnut comes from Europe.

The easiest place to start collecting nuts is on your own property. If you want to collect nuts from someone else's property or from a public space, seek permission from the landowner or grounds manager. Most people are grateful to have the nuts cleared from the ground.

Look for trees that are likely to yield healthy seeds. Avoid collecting nuts that come from trees that show signs of insect infestation or disease.

#### 2. Nut collection

Nuts usually fall in autumn—around October in most temperate states.

Only collect nuts that have ripened enough to fall to the ground; do not pick them from the tree. Most nuts, particularly acorns, are best when they've just dropped to the ground. If they're ripe enough, the caps are usually missing or easily removed. Larger nuts tend to yield larger seedlings.

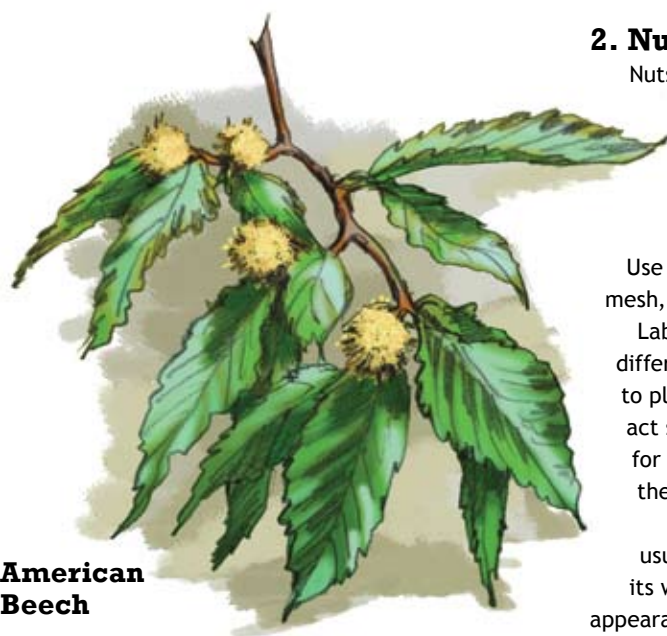
Use buckets or bags made out of materials that allow air flow—burlap, mesh, and paper work well. Plastic bags promote rotting.

Label the nuts by species type and collection location. Separate nuts of different species into different bags. This will help later in deciding where to plant the nuts or how to raise them. If you are uncertain about the exact species of the tree, collect one leaf and stem to include with the nuts for identification. Otherwise, keep sticks, leaves, and other debris out of the collection bags.

Don't bother collecting nuts with obvious problems. A hole in a nut usually indicates that some insect has already eaten the seed and bored its way out. Other indicators of a bad nut include darkened color, dried up appearance, or noticeably light weight.



Hickory



American Beech

#### 3. Nut storage

To best replicate the natural process, nuts should be planted as soon as possible after collection. If that's not feasible, then you need to store the nuts in a cold place. Place them in sealable plastic bags with a handful of peat moss to stave off mold or bacteria. Leave the bag slightly open or poke a couple of holes in it, and then put it in a refrigerator. This keeps the nuts safe for about a month, until the conditions are right for planting.

If you want to store the nuts through winter, then you need to simulate winter conditions while the nut remains dormant. For acorns, place them in one-gallon sealable plastic bags with some peat moss and store them in a refrigerator set at 34 to 36 degrees Fahrenheit. For hickory nuts, pecans, walnuts, and hazelnuts, create a moist mixture of half sand and half ground peat. Place nuts in a storage container with an airtight lid, then store in a cool, unheated location until spring.



#### 4. Prepare for planting

Remove from storage the amount of nuts that you're ready to plant. Rinse the nuts off to remove any dirt or debris. Remove acorn caps, but leave nut shells or hulls on for planting.

Before planting the nuts, sort out the ones that aren't viable. One test that works well for acorns (but not other nuts) is to place all the acorns in a tub of water overnight. The ones that float to the top are bad. The ones that sink to the bottom are ready for planting. Remove the good acorns from the water and place them on newspapers in a cool, dark location to dry. They should not become completely desiccated, however, or they will not grow well.

#### 5. Planting the nuts

The best time to plant is after an autumn rain while the ground is still moist. If planting nuts directly in the ground—whether at a park, along a stream, or in a propagation plot—simply create a hole using a stick or narrow rake. The depth should equal the diameter of the nut (usually about one inch). Drop in the nut, then cover completely with soil.

If feasible with the location and size of the planting area, you can water the nuts to increase their chances of growth.

The success rate of nuts can be very low due to factors like squirrels or competition from other plants. If the nuts are planted in a manageable plot, you can keep scavengers at bay by placing wire screen over the planted nuts, with bricks on top to hold down the screen. When the seedlings sprout in the spring, squirrels generally let them be, and the screen can be removed. Another good protection system is to use 2-foot-long plastic tubes staked into the ground where the nut is planted. This costs more, and requires you to eventually remove the tubes after seedlings grow, but it leads to the best results.

If you are growing a smaller number of nut trees, you can substantially increase your success rate by planting the nuts in pots. One way to do so is to plant two or three nuts per gallon pot and cover them with wire screens until the seedlings grow big enough to transplant. This can vary by species; oak seedlings grow slowly and may not be ready to plant until the following year. Other nut trees may be strong enough to transplant by fall.

#### 6. Distributing seedlings

Once seedlings are well established, often after at least one year of growth, you can prepare them for distribution to chapter members, community volunteers, students, or others who have tree planting projects. The simplest way to do this is to dig the seedling and its roots out of the soil and wrap it in something like wet newspapers. Place each seedling in a plastic bag—newspaper sleeves work well—and secure with a rubber band. Distribute them as soon as possible.



Black Walnut



Pecan



White Oak

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