



Harvesting, Handling & Storing Chestnuts

by Dave Armstrong, Pennsylvania Chapter

Harvest is as critical as any other part of the yearly chestnut growing process. Chestnuts are eaten by almost everything that crawls, walks and flies as soon as the bur opens. Even if your tree has never had viable nuts before, blue jays and squirrels will find the opening burs immediately and steal your valuable nuts before they ever hit the ground.

Consider an Early Harvest

As soon as nut-bearing burs begin to open, pick all of the burs, which may possibly have a nut inside. The seeds should still be viable and will continue to ripen inside the burr. (See the paragraph titled “Opening Burs and Removing Nuts” for more information.)

Identifying Pollinated and Un-pollinated Nuts

Chestnut trees develop burs whether they contain viable nuts or not, which can make it difficult to find the good nuts. Burs which have not been pollinated will start to open and drop nuts as much as a week before the fruitful bur.

Luckily, when many of the un-pollinated burs are opening, you can often spot the fruitful burs. They will still be closed and will also commonly be bright green in contrast to the brownish color of the empty burs.

The state of the fruitful burs can be assessed by carefully opening one or two (if there are many available to work with). When the developing fertilized nuts begin to show brown

color, you can expect the burs to start opening very soon. However, trees may start to drop nuts while the nuts are still white. Even if they are completely white, these nuts will often germinate if not damaged. Save them, preferably by leaving them attached to the bur and waiting for them to turn brown before storage.

Timing the Harvest

Start looking at the trees in early- to mid-September. When nuts inside closed burs are averaging 50-80 % brown, or fruitful burs are just starting to split open start picking. You can pick the burs early, even when the seams begin to show, but if you wait beyond seam splitting, the nuts become vulnerable to predation by rodents and other animals.

Harvesting

Smart preparation can make harvest an easier and safer undertaking. Experienced chestnut gatherers harvest nuts wearing thick leather gloves as bur spines can puncture skin, break off and, later, cause a festering wound. Another idea is to use a fruit picker basket on a pole, which will reach many burs without requiring a ladder. Remember to line the basket with mesh, so loose nuts from partially opened burs cannot fall through. A mesh bag works well for this. Some nut growers also suggest using a long window-washing pole with a hook attached to harvest the burs. Try not to remove or damage the stem on which the burs are held. Stem damage can reduce harvest the following year or even as far out as two years later.

Keep Detailed Records

If you want to use any of the nuts you harvest for planting new trees, be sure to keep burs and nuts from different trees in separately labeled bags. Send records of the mother trees you find to your TACF chapter's science contact or regional science coordinator, so their history can be tracked over time.

Opening Burs and Removing Nuts


Once you've harvested the unopened burs, place them in a simple container. Plastic or paper bags, trash bags, bushel baskets or laundry baskets are all good choices. Whatever container you use, leave the top open to allow the burs to breathe (burs generate a lot of moisture)

and label them for source identification. If the bags tip over and spill together you may not be able to maintain an accurate count for each of your nut sources. Look through the bags on a regular basis and remove nuts as they ripen.

If bags are stored in a cool, dark place, check them every four days; if stored in light at room temperature, check them at least every two days as they will ripen and dry faster. If there are still unopened burs after about 10 days, you can open, or shuck, the unopened burs and the seed will usually be viable. Again, don't forget to wear gloves.

Storing Nuts

If the nuts are to be saved for planting, place them in damp (not soaking) peat moss as soon as they are removed from the burs, as this is the best way to preserve them and keep them viable. The peat moss should be damp enough that you can squeeze it into a ball, but not so damp you can squeeze water out of it. Create an even distribution of nuts within the peat. It's very important to use sterile peat, not potting mix or other dense media. If you do not use sterile peat, or if you use peat moss that is too wet, you will encourage the growth of damaging mold.

Place the nuts and peat in a plastic bag or Tupperware container that has been punched with holes. This allows the nuts to breath, and also reduces the risk of mold by limiting the amount of moisture that can collect in the container. Label the bags with the number of nuts contained inside and the identity of the mother tree and/or cross from which the nuts were harvested. At this point, you should ship them to your TACF chapter's science contact or regional science coordinator for storage, or store the nuts yourself in the refrigerator. The ideal storage temperature for chestnuts is approximately 34°F, and even at this cold temperature the nuts will probably sprout by late winter or early spring. 



Dave Armstrong is the former Executive Director and Operations Coordinator for the Pennsylvania Chapter of TACF. He has been involved in the effort to restore the American chestnut since 1997 and in 2009, reported more than 600 volunteer hours of chestnut work.