

### **By Ryan Armbrust**

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What's the first thing that comes to mind when you hear "tree seeds?" Perhaps it's the avalanche of silver maple samaras (commonly called "helicopters") that collect in gutters in the spring.

Or maybe it brings forth memories of fighting tough Siberian elm and mulberry seedlings from perennial beds near your home. For me, and many other tree enthusiasts, tree seeds mean opportunities for new plants.

It's easy to gather seed from most trees—you just need to make sure your timing is right. Some trees will flower and then disperse seed early in the year, but most species won't have mature seeds until late summer or fall.

If the seed comes off the tree easily (without tearing any connective tissue), it's probably ready to be harvested. Acorns, for example, can be harvested when the tip begins to turn from green to yellow, and the acorn can be separated from the cap without damage.

In most cases, it's preferable to harvest seed directly from the tree instead of picking it up off the ground. Seed on the ground may be immature, it may be infested with weevils or other seed-eating insects or it may not even be from the tree it's found under!

Keep in mind that seeds are a product of sexual reproduction, so the plant that grows from the seed you collected may be somewhat different than the parent tree. This is especially true of apples and other fruit trees.

Proper storage of seed is very important. Acorns and fruit pits can be stored over the winter in a sandwich bag placed in the fridge, if a slightly damp – not wet – paper towel is included in the bag.

Pine seed can be stored in a brown paper bag in a cool, dry place for over a decade. Most birch seeds need to be planted right after harvest to ensure germination. Some seeds, such as the stone fruits, paw-paws, persimmons and dogwood fruit, need to have the pulp removed before the seed can be stored or planted.

Different species have different strategies for passing along their genes. Many short-lived lowland species such as hackberry, maple, honeylocust and ash will produce copious amounts of seeds every year, beginning at a young age.

In contrast, the longer-lived upland species such as hickory and oak will only produce large crops of seed every few years, in a process called "masting." This seems to be a strategy by the trees to overwhelm the seed-eaters (such as squirrels, deer and weevils) with more seed than they can possibly consume in the "mast year."

Invariably, the surplus of seeds will lead to at least a few making it to the spring when they will germinate and carry on the species.

For a tree that will live centuries, like an oak, it will only require a few surviving seedlings every couple decades for the parent tree's genes to persist. For a rapidly-growing lowland species like maple that may not survive the next ice storm, it can't take those chances. It has to produce a huge amount of seed—and seedlings—every year.

Nebraska lies at a sort of ecological crossroads between the northern and southern Great Plains, straddling the divide between eastern woodlands and western prairies. As such, dozens of trees reach the limits of their range here. Birches and aspen reach no further south and east. Hickories, sycamores and most species of oak cannot be found any further north and west.

Ponderosa pines find their eastern limit here, and American elms find their western limit. If you desire to grow a species beyond its natural range, it's best to start with seed collected at the edge of that extent.

For many species, Nebraska is at the limit of the range, which makes it a great place to collect seed!